

**Strikethrough Copies of Kentucky Water Quality Regulations  
401 KAR 10:001; 10:026; 10:029; 10:030; and 10:031**



1 ENERGY AND ENVIRONMENT CABINET

2 Department for Environmental Protection

3 Division of Water

4 **(Amended After Comments)**

5 401 KAR 10:001. Definitions for 401 KAR Chapter 10.

6 RELATES TO: KRS 146.200-146.360, 146.410-146.535, 146.550-146.570, 146.600-  
7 146.619, 146.990, 224.01-010, 224.01-400, 224.16-050, 224.16-070, 224.70-100-224.70-140,  
8 224.71-100-224.71-145, 224.73-100-224.73-120, 40 C.F.R. 136, EO 2008-507, 2008-537 [~~Part~~  
9 ~~136~~]

10 STATUTORY AUTHORITY: KRS 224.10-100, 224.70-100, 224.70-110

11 NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 authorizes the  
12 [~~Environmental and Public Protection~~] Cabinet to promulgate administrative regulations for  
13 the prevention, abatement, and control of all water pollution. EO 2008-507 and 2008-531,  
14 abolish the Environmental and Public Protection Cabinet and establish the new Energy  
15 and Environment Cabinet. This administrative regulation establishes definitions for terms used  
16 in 401 KAR Chapter 10.

17 Section 1. Definitions. (1) "Acute-chronic ratio" means the ratio of the acute toxicity,  
18 expressed as an  $LC_{50}$ , of an effluent or a toxic substance, to its chronic toxicity. It is used as a  
19 factor to estimate chronic toxicity from acute toxicity data.

20 (2) "Acute criteria" means the highest instream concentration of a toxic substance or an  
21 effluent to which an organism can be exposed for one (1) hour [~~a brief period of time~~] without

1 causing an unacceptable harmful effect.

2 (3) "Acute toxicity" means lethality or other harmful effect sustained by either an indigenous  
3 aquatic organism or a representative indicator organism used in a toxicity test, due to a short-  
4 term exposure, of ninety-six (96) hours or less, to a specific toxic substance or mixture of toxic  
5 substances.

6 (4) "Acute toxicity unit" means the reciprocal of the effluent dilution that causes the acute  
7 effect, or  $LC_{50}$ , by the end of the acute exposure period.

8 (5) "Adversely affect" or "adversely change" means to alter or change the community  
9 structure or function, to reduce the number or proportion of sensitive species, or to increase the  
10 number or proportion of pollution tolerant aquatic species so that aquatic life use support or  
11 aquatic habitat is impaired.

12 (6) ~~"Arithmetic mean for seven (7) consecutive days" means the average of a minimum~~  
13 ~~of two (2) samples taken on separate days in a seven (7) day period.~~

14 (7) ~~"Arithmetic mean for thirty (30) consecutive days" means the average of a minimum~~  
15 ~~of three (3) samples collected in separate calendar weeks during a period of thirty (30)~~  
16 ~~consecutive days with a minimum of twenty (20) days occurring between the first and last~~  
17 ~~sample days.~~

18 (8) "Balanced indigenous community" means a biotic community typically characterized by  
19 diversity, the capacity to sustain itself through cyclic seasonal changes, presence of necessary  
20 food chain species, and a lack of domination by pollution tolerant species. The community may  
21 include historically nonnative species introduced in connection with a program of wildlife  
22 management and species whose presence or abundance results from substantial, irreversible  
23 environmental modification. Normally such a community does not include species whose



1 presence or abundance is attributable to the introduction of pollutants that will be eliminated by  
2 compliance of all sources with 401 KAR 5:065, and may not include species whose presence or  
3 abundance is attributable to alternative effluent limitations imposed pursuant to 401 KAR 5:055.

4 (7) ~~[(9)]~~ "Best management practices" or "BMPs" means:

5 (a) For agriculture operations, as defined by KRS 224.71-100(3); or

6 (b) For all other purposes:

7 1. Schedules of activities, prohibitions of practices, maintenance procedures, and other  
8 management practices to prevent or reduce the pollution of waters of the commonwealth; and

9 2. ~~[(b) Include]~~ Treatment requirements, operating procedures, practices to control site run-  
10 off, pollution of surface water and groundwater from nonpoint sources, spillage or leaks, sludge  
11 or waste disposal, or drainage from raw material storage.

12 (8) ~~[(10)]~~ "Biochemical oxygen demand", "BOD", or "BOD<sub>5</sub>" means the amount of oxygen  
13 required to stabilize biodegradable organic matter under aerobic conditions within a five (5) day  
14 period. Other time periods may be measured, and if so, are indicated where the term is used.

15 (9) ~~[(11)]~~ "Carbonaceous biochemical oxygen demand" or "CBOD" means BOD, not  
16 including the nitrogenous oxygen demand of the wastewater.

17 (10) ~~[(12)]~~ "Chronic criteria" means the highest instream concentration of a toxic substance  
18 or an effluent to which organisms are able to be exposed for ninety-six (96) hours ~~[indefinitely]~~  
19 without causing an unacceptable harmful effect.

20 (11) ~~[(13)]~~ "Chronic toxicity" means lethality, reduced growth or reproduction, or other  
21 harmful effect sustained by either indigenous aquatic organisms or representative indicator  
22 organisms used in toxicity tests due to long-term exposures, relative to the life span of the  
23 organisms or a significant portion of their life span, to toxic substances or mixtures of toxic

1 substances.

2 **(12)** ~~[(14)]~~ "Chronic toxicity unit" means the reciprocal of the effluent dilution that causes  
3 twenty-five (25) percent inhibition of growth or reproduction to the test organisms by the end of  
4 the chronic exposure period.

5 **(13)** ~~[(15)]~~ "Clean Water Act" or "CWA" means the Clean Water Act as subsequently  
6 amended, 33 U.S.C. Section 1251 through 1387, otherwise known as the Federal Water Pollution  
7 Control Act.

8 **(14)** ~~[(16)]~~ "Coal remining operation" means:

9 (a) A surface coal mining operation, which begins after July 11, 1990, at a site on which a  
10 coal mining operation was conducted before August 3, 1977; and

11 (b) A surface coal mining operation existing on July 11, 1990, which receives a permit  
12 revision from the Department for Surface Mining Reclamation and Enforcement (DSMRE) in  
13 accordance with 405 KAR 8:010, Section 20 for a site on which a coal mining operation was  
14 conducted before August 3, 1977.

15 **(15)** ~~[(17)]~~ "Cold water aquatic habitat" or "CAH" means surface waters and associated  
16 substrate that are able to support indigenous aquatic life or self-sustaining or reproducing trout  
17 populations on a year-round basis.

18 **(16)** ~~[(18)]~~ "Concentrated animal feeding operation" **means one (1) of the following:**

19 **(a) "Large concentrated animal feeding operation" as defined in subsection (45) of this**  
20 **section;**

21 **(b) "Medium concentrated animal feeding operation" as defined in subsection (50) of**  
22 **this section; or**

23 **(c) "Small concentrated animal feeding operation" as defined in subsection (76) of this**

1 section.

2 (17) "Conventional domestic water supply treatment" means or includes coagulation,  
3 sedimentation, filtration, and disinfection.

4 ~~[is defined by 401 KAR 5:002 Section 1(37).]~~

5 (18) ~~[(19)]~~ "Conventional pollutant" means biochemical oxygen demand (BOD), chemical  
6 oxygen demand (COD), total organic carbon (TOC), total suspended solids (TSS), ammonia (as  
7 N), bromide, chlorine (total residual), color, fecal coliform, fluoride, nitrate, kjeldahl nitrogen,  
8 oil and grease, and phosphorus.

9 ~~[(20) "Conventional treatment" means or includes coagulation, sedimentation, filtration,~~  
10 ~~and disinfection.]~~

11 (19) ~~[(21)]~~ "Criteria" means specific concentrations or ranges of values, or narrative  
12 statements of water constituents that ~~[which]~~ represent a quality of water expected to result in an  
13 aquatic ecosystem protective of designated uses of surface waters. Criteria are derived to protect  
14 legitimate uses such as aquatic life, domestic water supply, and recreation and to protect human  
15 health.

16 (20) ~~[(22)]~~ "Day" means a twenty-four (24) hour period.

17 (21) ~~[(23)]~~ "Discharge" or "discharge of a pollutant" means the addition of a pollutant or  
18 combination of pollutants to waters of the commonwealth from a point source.

19 (22) ~~[(24)]~~ "Division" means the Kentucky Division of Water, within the Department for  
20 Environmental Protection, Energy and Environment ~~[Environmental and Public Protection]~~  
21 Cabinet.

22 (23) ~~[(25)]~~ "Domestic" means relating to household wastes or other similar wastes. It is used  
23 to distinguish municipal, household, or commercial water or wastewater services from industrial

1 water or wastewater services.

2 **(24) [(26)]** "Domestic sewage" means sewage devoid of industrial or other wastes and that is  
3 typical of waste received from residential facilities. It may include wastes from commercial  
4 developments, schools, restaurants, and other similar developments.

5 **(25) [(27)]** "Domestic water supply" or "DWS" means surface waters that with conventional  
6 **domestic water supply** treatment are suitable for human consumption through a public water  
7 system as defined in 401 KAR 8:010, culinary purposes, or for use in a food or beverage  
8 processing industry; and meet state and federal regulations under the Safe Drinking Water Act,  
9 as amended, 42 U.S.C. 300f - 300j-26.

10 **(26) [(28)]** "Effluent limitations" is defined at KRS 224.01-010(12).

11 **(27) [(29)]** "Environmental Protection Agency" or "EPA" means the United States  
12 Environmental Protection Agency.

13 **(28) [(30)]** "Epilimnion" means the thermally homogeneous water layer overlying the  
14 metalimnion of a thermally stratified lake or reservoir.

15 **(29) [(31)]** "E. coli" or "Escherichia coli" means an aerobic and facultative anaerobic gram  
16 negative, nonspore forming, rod shaped bacterium that can grow at forty-four and five tenths  
17 (44.5) degrees Celsius, that is ortho-nitrophenyl-B-D-galactopyranoside (ONPG) positive, and  
18 Methylumbelliferyl glucuronide (MUG) positive. It is a member of the indigenous fecal flora of  
19 warm-blooded animals.

20 **(30) [(32)]** "Eutrophication" means the enrichment of a surface water by the discharge or  
21 addition of a nutrient.

22 **(31) [(33)]** "Exceptional water" means a surface water categorized as exceptional by the  
23 cabinet pursuant to 401 KAR 10:030.

(32) ~~[(34)]~~ "Existing use" means a legitimate use being attained in or on a surface water of the commonwealth on or after November 28, 1975, irrespective of its use designation.

(33) ~~[(35)]~~ "Expanded discharge" means an increase in pollutant loading of twenty (20) percent or greater.

(34) ~~[(36)]~~ "°F" means degrees Fahrenheit.

(35) ~~[(37)]~~ "General permit" means a KPDES permit authorizing a category of discharges under KRS Chapter 224 within a geographical area, issued under 401 KAR 5:055.

(36) ~~[(38)]~~ "Harmonic mean flow" means the reciprocal of the mean of the reciprocal daily flow values.

(37) ~~[(39)]~~ "High quality water" means a surface water categorized as high quality by the cabinet pursuant to 401 KAR 10:030.

(38) ~~[(40)]~~ "Impact" means a change in the chemical, physical, or biological quality or condition of a surface water.

(39) ~~[(41)]~~ "Impairment" means a detrimental impact to a surface water that prevents attainment of a designated use.

(40) ~~[(42)]~~ "Indigenous aquatic community" means naturally occurring aquatic organisms including bacteria, fungi, algae, aquatic insects, other aquatic invertebrates, reptiles, amphibians, and fishes. Under some natural conditions one (1) or more of the above groups may be absent from a surface water.

(41) ~~[(43)]~~ "Inhibition concentration of twenty-five (25) percent" or "IC<sub>25</sub>" means the concentration that is determined by a linear interpolation method for estimating the concentration at which a twenty-five (25) percent reduction is shown in reproduction or growth in test organisms, and which statistically approximates the concentration at which an unacceptable

chronic effect is not observed.

~~(42)~~ [(44)] "Intermittent water" means a stream that flows only at certain times of the year.

~~(43)~~ [(45)] "Kentucky Pollutant Discharge Elimination System" or "KPDES" means the Kentucky program for issuing, modifying, revoking and reissuing, revoking, monitoring and enforcing permits to discharge, and imposing and enforcing pretreatment requirements.

~~(44)~~ [(46)] "KPDES permit" means a Kentucky Pollutant Discharge Elimination System permit issued to a facility, including a POTW, or activity pursuant to KRS Chapter 224 for the purpose of operating the facility or activity.

~~(45)~~ [(47)] "Large concentrated animal feeding operation" is defined by 40 C.F.R. 122.23(4), effective July 1, 2007.

~~(46)~~ "LC<sub>1</sub>" means that concentration of a toxic substance or mixture of toxic substances that is lethal, or immobilizing if appropriate, to one (1) percent of the organisms tested in a toxicity test during a specified exposure period.

~~(47)~~ [(48)] "LC<sub>50</sub>" means that concentration of a toxic substance or mixture of toxic substances that is lethal, or immobilizing if appropriate, to fifty (50) percent of the species tested in a toxicity test during a specified exposure period.

~~(48)~~ [(49)] "Maintain" means to preserve or keep in present condition by not allowing an adverse permanent or long-term change to water quality or to a population of an aquatic organism or its habitat.

~~(49)~~ [(50)] "Measurement" means the ability of the analytical method or protocol to quantify as well as identify the presence of the substance in question.

~~(50)~~ [(51)] "Medium concentrated animal feeding operation" is defined by 40 C.F.R. 122.23(6), effective July 1, 2007.

1 (51) "µg/l" means micrograms per liter, same as ppb, assuming unit density.

2 (52) "mgd" or "MGD" means million gallons per day.

3 (53) "Milligrams per liter" or "mg/l" means the milligrams of substance per liter of solution,  
4 and is equivalent to parts per million in water, assuming unit density.

5 (54) "Mixing zone" means a domain of a water body contiguous to a treated or untreated  
6 wastewater discharge with quality characteristics different from those of the receiving water. The  
7 discharge is in transit and progressively diluted from the source to the receiving system. The  
8 mixing zone is the domain where wastewater and receiving water mix.

9 (55) [~~"Modified Warm Weather Aquatic Habitat"~~] means water that has been found to be  
10 ~~incapable of supporting and maintaining a balanced, integrated, adaptive community of~~  
11 ~~warm water organisms because of largely irretrievable man-induced changes in the~~  
12 ~~watershed or to the physical habitat of the stream itself.~~

13 (56) "Natural temperature" means the temperature that would exist in waters of the  
14 commonwealth without the change of enthalpy of artificial origin, as contrasted with that caused  
15 by climatic change or naturally occurring variable temperature associated with riparian  
16 vegetation and seasonal changes.

17 (56) [(57)] "Natural water quality" means those naturally occurring physical, chemical, and  
18 biological properties of waters.

19 (57) [(58)] "Net discharge" means the amount of substance released to a surface water by  
20 excluding the influent value from the effluent value if both the intake and discharge are from and  
21 to the same or similar body of water.

22 (58) [(59)] "Nonconventional pollutant" means a pollutant not considered to be a  
23 conventional pollutant, including priority pollutants identified in 401 KAR 5:060.

1       (59) [(60)] "Nonpoint" means any source of pollutants not defined by a point source.

2       (60) "Other wastes" means sawdust, bark or other wood debris, garbage, refuse, ashes,  
3 offal, tar, oil, chemicals, acid drainage, wastes from agricultural enterprises, and other  
4 foreign substances not included within the definitions of industrial wastes and sewage that  
5 may cause or contribute to the pollution of any waters of the commonwealth.

6       (61) "Outstanding national resource water" means a surface water categorized by the cabinet  
7 as an outstanding national resource water pursuant to 401 KAR 10:030.

8       (62) "Outstanding state resource water" means a surface water designated by the cabinet as  
9 an outstanding state resource water pursuant to 401 KAR 10:031.

10       (63) "pCi/l" means picocuries per liter.

11       (64) "PCR" means primary contact recreation.

12       (65) "Point source" is defined by 33 U.S.C. 1362(14). ~~[means a discernible, confined, and~~  
13 ~~discrete conveyance from which pollutants are or may be discharged.]~~ The term does not  
14 include agricultural storm water run-off or return flows from irrigated agriculture.

15       ~~(66)~~ "POTW" means publicly-owned treatment works as defined in KRS 224.01-010.

16       ~~(67) ["Preexisting discharge" means a discharge that is occurring when applying for a~~  
17 ~~KPDES permit under 401 KAR 5:040 or 401 KAR 10:029.~~

18       ~~(68)~~ "Primary contact recreation water" means those waters suitable for full body contact  
19 recreation during the recreation season of May 1 through October 31.

20       (68) [(69)] "Productive aquatic community" means an assemblage of indigenous aquatic life  
21 capable of reproduction and growth.

22       (69) [(70)] "Propagation" means the continuance of a species by successful spawning,  
23 hatching, and development or natural generation in the natural environment, as opposed to the



1 maintenance of the species by artificial culture and stocking.

2 **(70) [(74)]** "Regional facility plan" means a type of water quality management plan  
3 addressing point sources of pollution for the purpose of areawide waste treatment management  
4 planning prepared by the designated regional planning agency pursuant to Section 201, 205, and  
5 208 of the Clean Water Act, **33 U.S.C. 1251-1387**, to control point sources of pollution within a  
6 planning area.

7 **(71) [(72)]** "Remined area" means only that area of a coal remining operation on which a coal  
8 mining operation was conducted before August 3, 1977.

9 **(72) [(73)]** "Representative indicator organism" means an aquatic organism designated for  
10 use in toxicity testing because of its relative sensitivity to toxicants and its widespread  
11 distribution in the aquatic environment.

12 **(73) [(74)]** "SCR" means secondary contact recreation.

13 **(74) [(75)]** "Secondary contact recreation waters" means those waters suitable for partial  
14 body contact recreation, with minimal threat to public health due to water quality.

15 **(75) [(76)]** "Seven-Q-ten" or "7Q<sub>10</sub>" means that minimum average flow which occurs for  
16 seven (7) consecutive days with a recurrence interval of ten (10) years.

17 **(76) "Small concentrated animal feeding operation" is defined by 40 C.F.R. 122.23(9),**  
18 **effective July 1, 2007.**

19 (77) "Source" means a building, structure, facility, or installation from which there is or may  
20 be a discharge of pollutants.

21 (78) "Standard" means a water quality standard.

22 (79) "Stormwater" means stormwater run-off, snow melt run-off, and surface run-off and  
23 drainage.

1 (80) "Surface waters" means those waters having well-defined banks and beds, either  
2 constantly or intermittently flowing; lakes and impounded waters; marshes and wetlands; and  
3 any subterranean waters flowing in well-defined channels and having a demonstrable hydrologic  
4 connection with the surface. ~~[Effluent ditches and]~~ Lagoons used for waste treatment and  
5 effluent ditches that are situated on property owned, leased, or under valid easement by a  
6 permitted discharger are not considered to be surface waters of the commonwealth.

7 (81) "Total dissolved solids" or "TDS" means the total dissolved solids (filterable residue) as  
8 determined by use of the method specified in 40 C.F.R. Part 136.

9 (82) "Total suspended solids" or "TSS" means the total suspended solids (nonfilterable  
10 residue) as determined by use of the method specified in 40 C.F.R. Part 136.

11 (83) "Toxic substance" means a substance that is bioaccumulative, synergistic, antagonistic,  
12 teratogenic, mutagenic, or carcinogenic and causes death, disease, a behavioral abnormality, a  
13 physiological malfunction, or a physical deformity in an organism or its offspring or interferes  
14 with normal propagation.

15 (84) "U.S. EPA" means the United States Environmental Protection Agency.

16 (85) "Warm water aquatic habitat" or "WAH" means a surface water and associated substrate  
17 capable of supporting indigenous warm water aquatic life.

18 (86) "Wetlands" means land that has a predominance of hydric soils and that is inundated or  
19 saturated by surface or groundwater at a frequency and duration sufficient to support, and that  
20 under normal circumstances does support, a prevalence of hydrophytic vegetation typically  
21 adapted for life in saturated soil conditions.

22 (87) "Zone of initial dilution" means the limited area permitted by the cabinet surrounding or  
23 downstream from a discharge location where rapid, first-stage mixing occurs. The zone of initial

1     dilution is the domain where wastewater and receiving water initially mix.

401 KAR 10:001 "Definitions for 401 KAR Chapter 10." (Amended After Comments) approved  
for promulgation:

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Date

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Leonard K. Peters, Secretary  
Energy and Environment Cabinet

## REGULATORY IMPACT ANALYSIS AND TIERING STATEMENT

Administrative Regulation #: 401 KAR 10:001

Contact Person: Sandy Gruzesky, Director

**(1) Provide a brief summary of:**

- (a) What this administrative regulation does:** This administrative regulation establishes definitions for terms used in 401 KAR Chapter 10.
- (b) The necessity of this administrative regulation:** This regulation defines the terms used in the chapter.
- (c) How this administrative regulation conforms to the content of the authorizing statutes:** KRS 224.10-100, 224.70-100, and 224.70-110 authorize the cabinet to establish administrative regulations to protect water quality.
- (d) How this administrative regulation currently assists or will assist in the effective administration of the statutes:** This regulation will provide definitions for terms used throughout the chapter so that the other regulations in the chapter may be properly interpreted and enforced.

**(2) If this is an amendment to an existing administrative regulation, provide a brief summary of:**

- (a) How the amendment will change this existing administrative regulation:** The amendments correct grammar errors, reflect the new cabinet name, and comply with KRS 13A requirements.
- (b) The necessity of the amendment to this administrative regulation:** The amendments were necessary to clarify the meanings of terms used throughout the chapter.
- (c) How the amendment conforms to the content of the authorizing statutes:** KRS 224.10-100, 224.70-100, and 224.70-110 authorize the cabinet to establish administrative regulations to protect water quality. These amendments will add in the understanding of the water quality standards regulations contained in 401 KAR chapter 10.
- (d) How the amendment will assist in the effective administration of the statutes:** The amendments were necessary to clarify the meanings of terms used throughout the chapter.

**(3) List the type and number of individuals, businesses, organizations, or state and local governments affected by this administrative regulation:** All individuals, businesses, organizations, and governments that use the Commonwealth's surface waters for residential, commercial, industrial, or recreational purposes could be impacted by this regulation.

**(4) Provide an analysis of how the entities identified in question (3) will be impacted by either the implementation of this administrative regulation, if new, or by the change, if it is an amendment, including:**

- (a) List the actions that each of the regulated entities identified in question (3) will have to take to comply with this administrative regulation or amendment:** None
- (b) In complying with this administrative regulation or amendment, how much will it cost each of the entities identified in question (3):** There will be no cost
- (c) As a result of compliance, what benefits will accrue to the entities identified in question (3):** Affected entities will be able to understand the terms used throughout 401 KAR Chapter 10.

**(5) Provide an estimate of how much it will cost the administrative body to implement this administrative regulation:**

**(a) Initially:** There are no initial costs as a result of creating this administrative regulation.

**(b) On a continuing basis:** There are no continuing costs as a result of creating this administrative regulation.

**(6) What is the source of the funding to be used for the implementation and enforcement of this administrative regulation?** Not applicable.

**(7) Provide an assessment of whether an increase in fees or funding will be necessary to implement this administrative regulation, if new, or by the change if it is an amendment:**

No increase in fees or funding will be necessary to implement this administrative regulation.

**(8) State whether or not this administrative regulation established any fees or directly or indirectly increased any fees:** This administrative regulation does not establish or increase fees.

**(9) TIERING: Is tiering applied? (Explain why or why not)** Tiering is not applied because definitions do not require tiering.

### FISCAL NOTE ON STATE OR LOCAL GOVERNMENT

Regulation #: 401 KAR 10:001

Contact Person: Sandy Gruzesky, Director

1. Does this administrative regulation relate to any program, service, or requirements of a state or local government (including cities, counties, fire departments, or school districts)?

Yes   X   No       

If yes, complete questions 2-4.

2. What units, parts or divisions of state or local government (including cities, counties, fire departments, or school districts) will be impacted by this administrative regulation? Government entities using these regulations will be able to find definitions for terms used throughout the chapter.
3. Identify each state or federal statute or federal regulation that requires or authorizes the action taken by the administrative regulation. KRS 224.10-100, 224.70-100, and 224.70-110 authorize the cabinet to establish administrative regulations to protect water quality.
4. Estimate the effect of this administrative regulation on the expenditures and revenues of a state or local government agency (including cities, counties, fire departments, or school districts) for the first full year the administrative regulation is to be in effect.
- (a) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for the first year? None
- (b) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for subsequent years? None
- (c) How much will it cost to administer this program for the first year? There will be no cost.
- (d) How much will it cost to administer this program for subsequent years? There will be no cost.

**Note:** If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

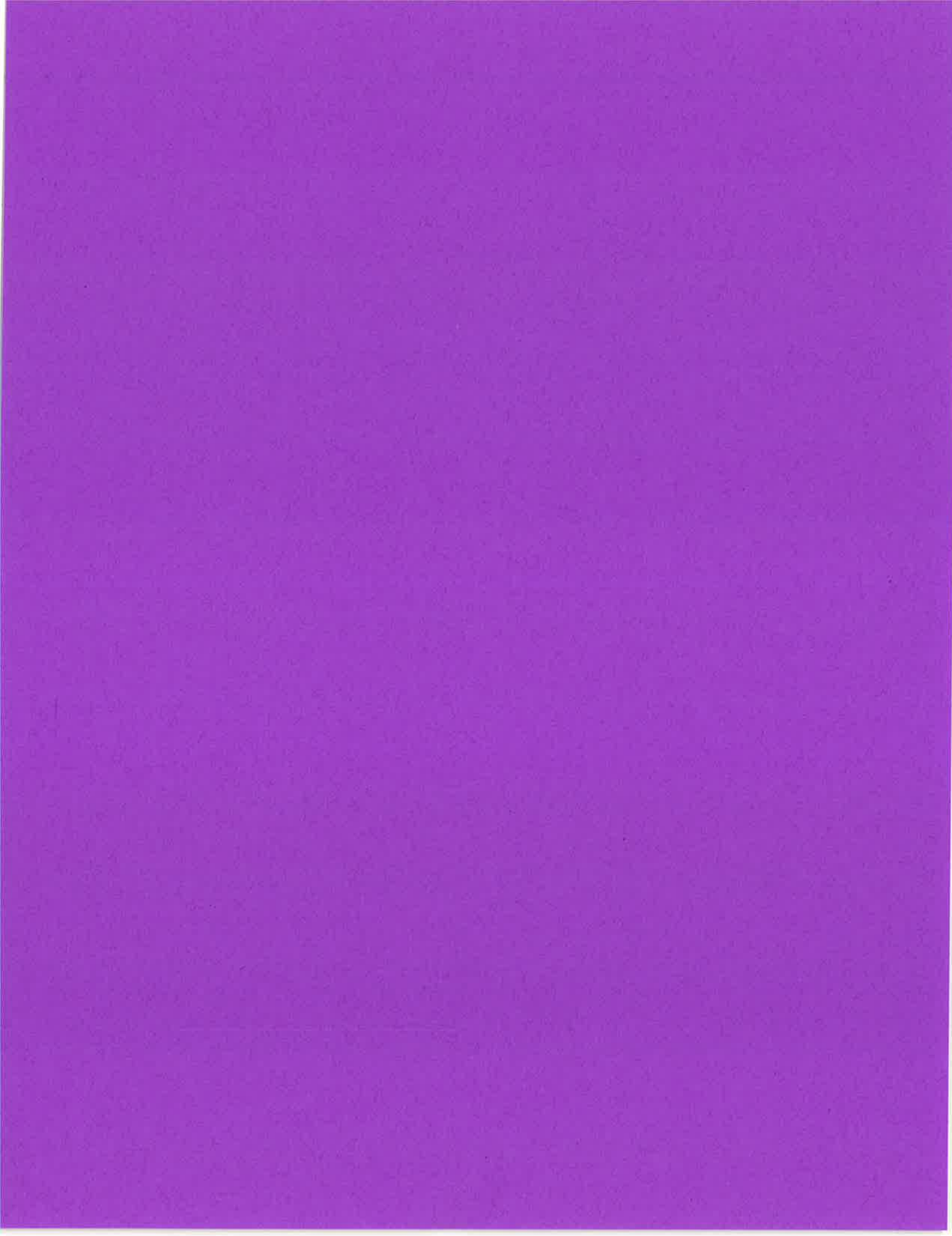
Revenues (+/-):

Expenditures (+/-):

Other Explanation:







The first part of the paper discusses the importance of understanding the cultural context of the research. It highlights the need for researchers to be sensitive to the values and beliefs of the communities they are studying. This is particularly important in the field of education, where cultural differences can significantly impact learning outcomes.

The second part of the paper focuses on the methodology used in the study. It describes the process of selecting participants, collecting data, and analyzing the results. The authors emphasize the importance of using a mixed-methods approach to gain a comprehensive understanding of the research topic.

The third part of the paper presents the findings of the study. It discusses the results of the quantitative data analysis and the insights gained from the qualitative interviews. The authors conclude that there are significant differences in learning outcomes between the two groups, and these differences can be attributed to cultural factors.

The final part of the paper discusses the implications of the findings for future research and practice. It suggests that educators should be aware of the cultural context of their students and tailor their teaching methods accordingly. The authors also recommend further research to explore the underlying reasons for the observed differences.

## ENVIRONMENTAL AND PUBLIC PROTECTION CABINET

Department for Environmental Protection

Division of Water

(Amended After Comments)

**401 KAR 10:026. Designation of uses of surface waters.**

RELATES TO: KRS 146.200-146.360, 146.410-146.535, 146.550-146.570, 146.600-146.619, 146.990, 224.01-010, 224.01-400, 224.16-050, 224.16-070, 224.70-100-224.70-140, 224.71-100-224.71-145, 224.73-100 - 224.73-120, EO 2008-507, 2008-531

STATUTORY AUTHORITY: KRS 146.220, 146.241, 146.270, 146.410, 146.450, 146.460, 146.465, 224.10-100, 224.16-050, 224.16-060, 224.70-100, 224.70-110, 40 C.F.R. Part 131, 16 U.S.C. 1271-~~1287~~ [et seq.], 1531-1544 [et seq.], 33 U.S.C. 1311, 1313, 1314, 1316, 1341

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the [Environmental and Public Protection] cabinet to develop and conduct a comprehensive program for the management of water resources and to provide for the prevention, abatement, and control of pollution. This administrative regulation and 401 KAR 10:001, 10:029, 10:030, and 10:031~~[5:002, 5:029, 5:030, and 5:034]~~ establish procedures to protect the surface waters of the Commonwealth, and thus protect water resources. EO 2008-507 and 2008-531, effective June 16, 2008, abolish the Environmental and Public Protection Cabinet and establish the new Energy and Environment Cabinet. This administrative regulation applies the designated uses described in 401 KAR 10:031~~[5:034]~~ to the surface waters of the Commonwealth. This administrative regulation also makes all surface waters subject to the general criteria specified in 401 KAR 10:031~~[5:034]~~, Section 2. ~~[Definitions for terms used in this administrative regulation are found in 401 KAR 5:002.]~~

Section 1. Scope of Designation. (1) Surface waters listed in this administrative regulation shall be designated for all legitimate uses contained in KRS 224.70-100(1) except as specified in 401 KAR 10:031~~[5:034]~~, Sections 5 and 8, or until redesignated in accordance with the procedures of this administrative regulation.

(2) Designated uses are:

- (a) Warm water aquatic habitat;
- (b) Cold water aquatic habitat;
- (c) Primary contact recreation;
- (d) Secondary contact recreation;
- (e) Domestic water supply; ~~and [and]~~
- (f) Outstanding state resource water; ~~[f and~~
- ~~(g) Modified warm water aquatic habitat.]~~

(3) Listed waters shall meet all criteria applicable to their designated uses and those criteria listed in 401 KAR 10:031~~[5:034]~~, Section 2, unless the cabinet grants an exception pursuant to 401 KAR 10:031~~[5:034]~~, Section 10 or 11.

(4) Outstanding state resource waters may have unique water quality characteristics that shall be protected by additional criteria established in 401 KAR 10:031~~[5:034]~~, Section 8.

Section 2. Redesignation of Surface Water Uses. (1)(a) Surface waters may be redesignated only upon affirmative findings by the cabinet pursuant to Sections 3 and 4 of this administrative regulation.

(b) Before redesignating a surface water, the cabinet shall provide notice and an opportunity for a public hearing.

(2) In redesignating a surface water, the cabinet shall ensure that its water quality standards provide for the attainment and maintenance of the water quality standards of downstream surface waters.

(3) A designated use shall not be removed for a surface water if that use is an existing use, or if the use may be attained by implementing effluent limitations required under Sections 301(b) and 306 of the Clean Water Act, 33 U.S.C. 1311(b) and 1316, and by implementing cost-effective ~~[and reasonable]~~ best management practices for nonpoint source control.

(4) If a surface water is designated for a use that is not an existing use, the cabinet shall redesignate the surface water upon demonstration that the designated use is unattainable because:

- (a) Naturally occurring pollutant concentrations prevent the attainment of the use;
- (b) Natural, ephemeral, intermittent, or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges;

(c) Human caused conditions or sources of pollution ~~[that]~~ prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place;

(d) Dams, diversions, or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the surface water to its original condition or to operate ~~the [such]~~ modification in a way that would result in the attainment of the use;

(e) Physical conditions related to the natural features of the surface water, ~~but unrelated to water quality, preclude attainment of the aquatic life use, such as the lack of a proper substrate, cover, flow, depth, pools, or riffles[-and the like, unrelated to water quality, preclude attainment of the aquatic life use];~~ or

(f) Controls more stringent than those required by Sections 301(b) and 306 of the Clean Water Act, 33 U.S.C. 1311(b) and 1316, would result in substantial and widespread economic and social impact as determined by the guidelines in ~~["]Interim Economic Guidance for Water Quality Standards Workbook["], EPA, March 1995 [incorporated by reference in Section 6 of this administrative regulation].~~

(5) Redesignations shall be consistent with the antidegradation provisions of 401 KAR 10:029 and 10:030 ~~[5:029 and 401 KAR 5:030].~~

Section 3. Documentation for Redesignations. (1)(a) A person may request redesignation of surface water uses by petition to the cabinet.

(b) The petitioner shall provide the cabinet with the documentation required in subsection (3) of this section and shall have the burden of proof that the redesignation is appropriate.

(2)(a) The cabinet may propose redesignations of surface water uses.

(b) The cabinet shall provide documentation for those surface waters that it proposes for use redesignation.

(3) Documentation to support the redesignation of a surface water of the Commonwealth shall be:

(a) A United States Geological Survey 7.5 minute topographic map or its equivalent ~~[approved by the cabinet]~~ showing those surface waters to be redesignated, with a description consisting of a river mile index with existing and proposed discharge points;

(b) Existing uses and water quality data for the surface waters for which the redesignation is proposed. If adequate data are unavailable, additional studies ~~shall~~~~[may]~~ be required by the cabinet;

(c) Descriptions of general land uses and specific land uses adjacent to the surface waters for which the redesignation is proposed;

(d) The existing and designated uses of the downstream waters into which the surface water under consideration discharges;

(e) General physical characteristics of the surface water including width, depth, bottom composition, and slope;

(f) The frequency of occasions when there is no natural flow in the surface water and the 7Q<sub>10</sub> and harmonic mean flow values for the surface water and adjacent surface waters;

(g) An assessment of the existing and potential aquatic life habitat in the surface waters under consideration and the adjacent upstream surface waters.

1. The existing aquatic life shall be documented and livestock and natural wildlife dependence on the surface water shall be assessed.

2. The occurrence of individuals or populations, indices of diversity and well-being, and abundance of species of any unique native biota shall be documented;

(h) The proposed designated uses for the surface water in question; and

(i) An explanation of the irretrievable person-induced, or natural conditions ~~that~~~~[which]~~ preclude attainment of a higher use designation or an assessment of the substantial and widespread social and economic impacts resulting from the imposition of additional controls necessary for existing point sources, beyond the most stringent effluent limitation levels normally required for the sources.

Section 4. Procedures for Redesignation. (1) For each of the surface waters for which a redesignation is proposed, the cabinet or petitioner shall prepare a fact sheet containing the following information:

(a) The name and address of the petitioner;

(b) The name and sketch or description of the surface water proposed for specified use redesignations, including the location of existing and proposed dischargers;

(c) The proposed use redesignations;

(d) A brief abstract of the supportive documentation, which demonstrates that the redesignation is appropriate;

(e) The appropriate water quality criteria for the surface water based on the proposed designated use;

(f) The treatment requirements proposed for discharges to the surface water in question if designated for the proposed use; and

(g) A "plain English" summary of the implications of the designation for the community and other users or potential users of the surface water in question.

(2) The cabinet shall document the determination to propose or deny redesignation as a result of a petition, and shall provide a copy of the

decision to the petitioner and other interested parties.

Section 5. Surface Water Use Designations. (1) Listed in the tables below are the use designations for specific surface waters of the Commonwealth. The county column indicates the county in which the mouth or outlet of the surface water is located. The identifying symbols for use designations are listed in table A of this section.[:]

Table A: Use Designation Symbols	
WAH	Warm Water Aquatic Habitat
CAH	Cold Water Aquatic Habitat
PCR	Primary Contact Recreation
SCR	Secondary Contact Recreation
DWS	Domestic Water Supply, applicable at existing points of public water supply intake <del>[withdrawal]</del>
OSRW	Outstanding State Resource Water
<del>[MWAH]</del>	<del>[Modified Warm Water Aquatic Habitat]</del>

(2)(a) Surface waters not specifically listed in this section are designated for the uses ~~[use]~~ of warm water aquatic habitat, primary contact recreation, secondary contact recreation and domestic water supply in accordance with Section 1 of this administrative regulation.

(b) ~~[Waters where]~~ Domestic water supply criteria in 401 KAR 10:031, Section 6, are implemented at locations listed ~~[are found]~~ in Table B in this paragraph.

Table B: SURFACE WATER INTAKES FOR DOMESTIC WATER SUPPLY USE		
Name	Description	County
<b>BIG SANDY RIVER BASIN</b>		
Elkhorn City Water Department	Mile 13.7 of Russell Fork	Pike
Paintsville Utilities Commission	Mile 38.9 of Levisa Fork	Johnson
Louisa Municipal Water Works	Mile 0.6 of Levisa Fork	Lawrence
Prestonsburg City Utilities Commission	Mile 57.5 of Levisa Fork	Floyd
Pikeville Water Works/US Filter	Mile 88.2 of Levisa Fork	Pike
Martin County Water District #1	Mile 23.8 of Tug Fork	Martin
US Filter/Southern Water & Sewer District	Mile 65.4 of Levisa Fork	Floyd
Jenkins Water Works	Mile 0.2 of Little Elkhorn Creek (Elkhorn Lake)	Letcher
Mountain Water District	Mile 4.6 of Russell Fork	Pike
Martin County Water District #1	Mile 23.8 of Tug Fork	Martin
Jenkins Water Works	Mile 24.1 of Elkhorn Creek	Letcher
<b>Little Sandy River Basin</b>		
Grayson Utility Commission	Mile 40.1 of Little Sandy River	Carter
Greenup Water Plant	Mile 0.7 of Little Sandy River	Greenup
<b>Tygarts Creek Basin</b>		
Olive Hill Water Works	Mile 2.2 of Perry Branch (Olive Hill Reservoir)	Carter
Olive Hill Water Works	Mile 81.1 of Tygarts Creek	Carter
<b>Upper Cumberland River Basin</b>		
Water Service Corporation of KY	Mile 3.2 of Little Yellow Creek (Fern Lake)	Bell
Somerset Water Service	Mile 513.6 of Cumberland River (Lake)	Pulaski

	Cumberland)	
Corbin City Utilities Commission	Mile 17.3 of Laurel River (City Reservoir)	Laurel
Burnside Water Company	Mile 517.6 of Cumberland River (Lake Cumberland)	Pulaski
Albany Municipal Water Works Plant A	Mile 7.0 of Indian Creek (Lake Cumberland)	Clinton
Monticello Water & Sewer Commission	Mile 502.2 of Cumberland River (Lake Cumberland)	Wayne
London Utility Commission	Mile 1.2 of Indian Camp Creek (Laurel River Reservoir)	Laurel
Harlan Municipal Water Works	Mile 0.2 of Poor Fork	Harlan
Mt Vernon Municipal Water Works	Mile 3.3 of Renfro Creek (Lake Linville)	Rockcastle
Laurel County Water Department #2	Mile 23.9 of Laurel River (Dorthea Dam)	Laurel
McCreary County Water District Plant A	Mile 8.9 of Laurel Creek (Laurel Creek Reservoir)	McCreary
Burkesville Municipal Water Works	Mile 427.05 of Cumberland River	Cumberland
McKee Municipal Water Works	Mile 2.3 of Bills Branch (McKee City Reservoir)	Jackson
Williamsburg Water Works	Mile 584.15 of Cumberland River	Whitley
Jamestown Municipal Water Works	Mile 3.9 of Greasy Creek Branch (Lake Cumberland)	Russell
Jackson County Water Association Inc	Mile 2.1 of Flat Lick Creek (Beulah [Tyner] Lake)	Jackson
Knox County Utility Commission	Mile 642.61 of Cumberland River	Knox
Wood Creek Water District	Mile 7.2 of Wood Creek (Wood Creek Lake)	Laurel
Cumberland Water Works	Mile 25.2 of Poor Fork	Harlan
Pineville Water System	Mile 3.2 of Cannon Creek (Cannon Creek Lake)	Bell
Benham Water Works	Mile 3.5 of Looney Creek	Harlan
Woodson Bend Resort	Mile 2.98 of South Fk. Cumberland River (Lake Cumberland)	Pulaski
Barbourville Utility Commission	Mile 1.3 of Indian Camp Creek (Laurel River Lake)	Laurel
Cawood Water District	Mile 11.0 of Martins Fork	Harlan
Cumberland County Water District	Mile 419.7 of Cumberland	Cumberland

	River	
Ky Parks Cumberland Falls	Mile 562.5 of Cumberland River	Whitley
Barbourville Utility Commission	Mile 635.5 of Cumberland River	Knox
Albany Municipal Water Works Plant B	Mile 6.7 of Indian Creek (Lake Cumberland)	Clinton
McCreary County Water District Plant B	Mile 31.0 of South Fork Cumberland River (Lake Cumberland)	McCreary
Evarts Municipal Water Works	Mile 0.1 on UT of Bailey Creek. UT at mile 0.6	Harlan
Evarts Municipal Water Works	Mile 1.0 of Bailey Creek	Harlan
Bell County Forestry Camp	Mile 0.2 of Bear Creek (Chenoa Lake)	Bell
<b>Licking River Basin</b>		
Millersburg Municipal Water Works	Mile 13.3 of Hinkston Creek	Bourbon
Paris Municipal Water Works	Mile 16.7 of Stoner Creek	Bourbon
Northern Ky. Water Service District Plant A	Mile 4.8 of Licking River	Kenton
Mt Sterling Water & Sewer System	Mile 36.1 of Slate Creek at mile 36.1 (Reservoir)	Montgomery
Cynthiana Municipal Water Works	Mile 51.2 of South Fork Licking River	Harrison
Flemingsburg Utilities	Mile 0.7 of UT to Town Branch (Flemingsburg Lake)	Fleming
Williamstown Municipal Water	Mile 1.89 of Lake Branch (Lake Williamstown)	Grant
Morehead State University Water Plant	Mile 0.7 of Evans Branch (Evans Branch Impoundment)	Rowan
Morehead State University Water Plant	Mile 13.7 of Triplett's Creek	Rowan
Carlisle Municipal Water Plant	Mile 3.5 of UT to Brushy Fork (City Lake)	Nicholas
Falmouth Water Plant	Mile 52.7 of Licking River	Pendleton
Morehead Utility Plant Board	Mile 177.7 of Licking River	Rowan
West Liberty Water Company	Mile 228.6 of Licking River	Morgan
Western Fleming Water District	Mile 102.5 of Licking River	Nicholas
Salyersville Municipal Water Works	Mile 273.2 of Licking River	Magoffin
Cynthiana Municipal Water Works	Mile 84.5 of Licking River	Harrison
Flemingsburg Utilities	UT of Town Branch at mile 1.6 (Old Reservoir)	Fleming
Flemingsburg Utilities	Mile 131.8 of Licking River	Fleming
Carlisle Municipal	Mile 110.2	Nicholas

Water Department	Licking River	
West Liberty Water Company	Mile 3.9 of North Fork Licking River (Cave Run Lake)	Rowan
Cave Run Water Commission	Mile 197.4 of Licking River (Cave Run Lake)	Menifee
Rattlesnake Ridge Water District	Mile 57.4 of Little Sandy River (Grayson Lake)	Elliott
<b>Kentucky River Basin</b>		
Lancaster Municipal Water Works	Mile 145.2 of Kentucky River (Pool #8)	Garrard
Northpoint Training Center	Mile 17.3 of Dix River (Herrington Lake)	Boyle
Frankfort Electric & Water Plant Board	Mile 71.7 of Kentucky River (Pool #4)	Franklin
Hazard Water Department	Mile 104.1 of North Fork Kentucky River	Perry
Wilmore Utilities System	Mile 117.2 of Kentucky River (Pool #6)	Jessamine
Nicholasville Water Works	Mile 157.9 of Kentucky River (Pool #8)	Jessamine
Berea Municipal Utilities	Mile 3.6 of Cowbell Creek Cowbell Lake	Madison
Jackson Municipal Water Works	Mile 47.2 of North Fork Kentucky River	Breathitt
Kentucky American Water Company Plant A	Mile 171.5 of Kentucky River (Pool #9)	Fayette
Kentucky American Water Company Plant B	Mile 10.6 of East Hickman Creek (Reservoir #4)	Fayette
Kentucky American Water Company	Reservoir #1 (Lake Ellerslie)	Fayette
Danville Water Works	Mile 18.9 of Dix River (Herrington Lake)	Boyle
Lawrenceburg Municipal Water Works	Mile 86.2 of Kentucky River	Anderson
Versailles Municipal Water Works	Mile 87.7 of Kentucky River (Pool 5)	Woodford
Harrodsburg Municipal Water Works	Mile 121.0 of Kentucky River (Pool 7)	Mercer
Stanford Water Works	Mile 6.0 of Neals Creek.(Rice Lake [Stanford City Reservoir])	Lincoln
Richmond Utilities Board	Mile 206.49 of Kentucky River (Pool 11)	Madison
Whitesburg Municipal Water Works/Veolia Water	Mile 150.9 of North Fork Kentucky River	Letcher
Manchester Water Works	Mile 3.9 of Beech Creek (Bert Combs Lake)	Clay
Georgetown Municipal Water & Sewer	Mile 33.5 of North Elkhorn Creek	Scott
Beattyville Water Works	Mile 1.3 of North Fork Kentucky	Lee



	<b>River (Pool #14)</b>	
Bullock Pen Water District	Mile 2.8 Of Bullock Pen Creek (Bullock Pen Lake)	Grant
Ky Parks Natural Bridge State Park	Mile 0.11 of Mill Creek (Mill Creek Lake)	Powell
Winchester Municipal Utilities	Mile 6.5 of Lower Howard Creek (Winchester Reservoir {Carol E. Ecton Reservoir})	Clark
Winchester Municipal Utilities	Mile 1180.8 of Kentucky River (Pool #10)	Clark
Campton Water Works	Mile 0.3 of Hiram Branch (Campton Lake)	Wolfe
Hyden-Leslie County Water District	Mile 75.4 of Middle Fork Kentucky River (Buckhorn Reservoir)	Leslie
Booneville Water & Sewer District	Mile 12.8 of South Fork Kentucky River	Owsley
Georgetown Municipal Water & Sewer	Mile 0.61 of UT (Royal Springs) at mile 33.5 of North Elkhorn Creek	Scott
Owenton Water Works	Mile 0.6 of Severn Creek	Owen
Owenton Water Works	Mile 1.1 of UT to North Severn Creek at mile 5.5 (Lower Thomas Lake)	Owen
Irvine Municipal Utilities	Mile 223.4 of Kentucky River (Pool #11)	Estill
Bluegrass Army Depot	Mile 0.4 of Little Muddy Creek (Lake Vega)	Madison
Beech Fork Water Commission	Mile 0.3 of Beech Fork (Beech Fork Reservoir)	Powell
Berea Municipal Utilities	Mile 2.1 of East Fork Silver Creek (Lower Silver Creek Lake)	Madison
Berea Municipal Utilities	Mile 2.8 of East Fork Silver Creek (Upper Silver Creek Lake [Kales Lake])	Madison
Berea Municipal Utilities	Mile 2.5 of Owsley Fork (Owsley Fork Lake)	Madison
Manchester Water Works	Mile 18.9 of Goose Creek	Clay
Blackey Municipal Water Works	Mile 131.0 of North Fork Kentucky River	Letcher
Beech Fork Water Commission	Mile 31.0 of Red River	Powell
<b>Salt River Basin</b>		
Shelbyville Municipal Water & Sewer Commission	Mile 28.0 of Guist Creek (Guist Creek Lake)	Shelby
Bardstown Municipal	Mile 1.1 of	Nelson

Water Works	Buffalo Creek (Lake Sympson)	
Lebanon Water Works Company	Mile 98.2 of Rolling Fork River	Marion
Springfield Water Works	Mile 4.2 of Long Lick Creek (Willisburg Lake)	Washington
Lebanon Water Works Company	Mile 1.0 of Fagan Branch (Fagan Branch Reservoir)	Marion
Springfield Water Works	Mile 1.3 of Allen Branch (Springfield Reservoir)	Washington
<b>Green River Basin</b>		
Hidden Valley Springs	Mile 0.4 of Hidden Valley Spring of UT to Rock Creek at mile 5.9	Grayson
Morgantown Utilities Commission	Mile 144.8 of Green River	Butler
Campbellsville Water Works	Mile 1.3 of Trace Fork (City Reservoir)	Taylor
Columbia Utilities Commission	Mile 42.7 of Russell Creek	Adair
Glasgow Water Co/Plant B	Mile 22.4 of Beaver Creek	Barren
Greensburg Municipal Water Works	Mile 283.5 of Green River	Green
Livermore Water Works	Mile 71.9 of Green River	McLean
Elizabethtown Municipal Water Works A	From Old City Spring at mile 10.6 of Valley Creek	Hardin
Elizabethtown Municipal Water Works A	Gaithers Station Spring at mile 6.9 of Valley Creek	Hardin
Bowling Green Municipal Utilities	Mile 38.1 of Barren River	Warren
Green River Valley Water District	Rio Springs at UT to Green River at mile 240.6	Hart
Hodgenville Water Works	Mile 5.8 of North Fork Nolin River	Larue
Hardinsburg/Us Filter	Tules Creek at mile 1.2 (Rough River Reservoir)	Breckinridge
Central City Municipal Water & Sewer	Mile 86.0 of Green River	Muhlenberg
Calhoun Water Works	Mile 63.9 of Green River	McLean
Hartford Municipal Water Works	Mile 29.8 of Rough River	Ohio
Greenville Utilities Commission	Luzerne Lake (Luzerne Lake no longer connected to Caney Creek at mile 2.3)	Muhlenberg
Ohio County Water Plant	Mile 131.9 of Green River	Ohio
Franklin Water Plant	Mile 23.4 of West Fork Drake's Creek	Simpson
Glasgow Water Co/Plant A	Mile 86.8 of Barren River (Barren River Reservoir)	Barren

Leitchfield Municipal Water Works	Mile 107.7 of Rough River (Reservoir)	Grayson
Campbellsville Water Works	Mile 5.3 of Robinson Creek (Green River Reservoir)	Taylor
Edmonson County Water District	Mile 183.7 of Green River	Edmonson
Elizabethtown Municipal Water Works B	Mile 2.1 of Freeman Creek (Freeman Lake)	Hardin
Tompkinsville Municipal Water Works	Mile 6.0 of Mill Creek (Mill Creek Reservoir)	Monroe
Madisonville Municipal Water Works	Mile 54.1 of Green River	Hopkins
Liberty Water Works	Mile 0.9 of Hickman Creek (Lake Liberty)	Casey
City of Lafayette (Tennessee)	Mile 118.4 of Barren River	Monroe
Stanford Water Works	Mile 0.6 of UT to Green River (James C. Harris Reservoir)	Lincoln
Hardin County Water District #2	Nolin River at mile 75.3 (White Mills Spring)	Hardin
Green River Valley Water District	Mile 240.6 of Green River	Hart
Scottsville Municipal Water Works	Mile 88.6 of Barren River (Barren River Lake)	Allen
Butler County Water System	Mile 143.8 of Green River	Butler
Edmonson County Water District	Mile 23.5 of Nolin River (Nolin Reservoir)	Grayson
Columbia Utilities Commission	Mile 317.5 of Green River (Green River Reservoir)	Adair
Henderson Water Utilities/South	Mile 41.3 of Green River	Webster
Webster Cnty Water District	Mile 47.5 of Green River	Webster
Hodgenville Water Works	Mile 0.3 of UT at mile 8.1 of North Fork Nolin River (Salem Lake)	Larue
Grayson County Water District	Mile 97.7 of Rough River (Rough River Reservoir)	Grayson
Lower Cumberland River Basin		
Kentucky State Penitentiary	Mile 40.2 of Cumberland River (Lake Barkley)	Lyon
Hopkinsville Water Environmental Authority	Mile 14.2 of North Fork Little River	Christian
Hopkinsville Water Environmental Authority	Mile 11.9 of Little River (Lake Barkley)	Trigg
Eddyville Municipal Water Works	Mile 1.5 of Knob Creek (Lake Barkley)	Lyon
Princeton Water Department	Mile 41.9 of Cumberland River (Lake Barkley)	Lyon

Kuttawa Municipal Water Plant	Barkley) Mile 37.9 of Cumberland River (Lake Barkley)	Lyon
Barkley Lake Water District	Mile 0.7 of Hopson Creek (Lake Barkley)	Trigg
Crittenden-Livingston Co Water District	Mile 14.0 of Cumberland River	Livingston
Hopkinsville Water Environmental Authority	From Hopkinsville Stone Quarry No. 1 (South Quarry) adjacent to North Fork Little River at mile 14.8	Christian
Cadiz Water Company	Mile 13.5 of Little River	Trigg
Hopkinsville Water Environmental Authority	Hopkinsville Stone Quarry No. 2 (North Quarry) adjacent to White Creek at mile 0.2	Christian
TVA-Land Between The Lakes, Wrangler	Mile 1.0 on UT of Lick Creek at mile 1.1	Trigg
Eddyville Municipal Water Works	Mile 40.2 of Cumberland River (Lake Barkley)	Lyon
Tradewater River Basin		
Providence Water Works	Mile 0.3 of Owens Creek (New Providence City Lake)	Webster
Madisonville Municipal Water Works	Mile 6.3 of Greasy Creek (Lake Pewee).	Hopkins
Earlington Water Works	Mile 0.2 of UT to Clear Creek at mile 26.5 (Loch Mary Reservoir)	Hopkins
Dawson Springs City Water & Sewer	Mile 0.1 of Piney Creek (Lake Beshear)	Caldwell
Providence Municipal Water Works	Mile 41.3 of Tradwater River	Webster
Ohio River Basin (Main Stem And Minor Tributaries [Note: river miles follow the USGS convention of starting mileage beginning at Pittsburgh, PA and ending at river mouth])		
Maysville Utility Commission	Mile 408.5 of Ohio River	Mason
Ashland Municipal Water Works	Mile 319.68 of Ohio River	Boyd
Northern Ky Water Service District - Newport Plant	Mile 463.6 of Ohio River	Campbell
Paducah Water Works	Mile 935.6 of Ohio River	McCracken
Louisville Water Company /ZPS A	Mile 600.6 of Ohio River	Jefferson
Henderson Water & Sewer Department	Mile 803.6 of Ohio River	Henderson
Northern Ky Water Service District Plant B	Mile 462.7 of Ohio River	Campbell
Morganfield Municipal Water Works	Mile 840.0 of Ohio River	Union
Russell Water Plant	Mile 327.7 of Ohio River	Greenup
Marion Municipal	Mile 26.4 of	Crittenden

Water Works	Crooked Creek (City Lake)	
US Army Ft Knox A	Mile 8.6 of Otter Creek	Meade
Louisville Water Company BEPWTP B	Mile 594.7 of Ohio River	Jefferson
Sturgis Municipal Water Works	Mile 871.4 of Ohio River	Union

~~Table B: SURFACE WATER INTAKES FOR DOMESTIC WATER SUPPLY USE~~

Name	Description	County
<del>BIG SANDY RIVER BASIN</del>		
<del>Elkhorn City Water Department</del>	<del>Mile 13.7 of Russell Fork</del>	<del>Pike</del>
<del>Paintsville Utilities Commission</del>	<del>Mile 38.9 of Levisa Fork</del>	<del>Johnson</del>
<del>Louisa Municipal Water Works</del>	<del>Mile 0.6 of Levisa Fork</del>	<del>Lawrence</del>
<del>Prestonsburg City Utilities Commission</del>	<del>Mile 57.5 of Levisa Fork</del>	<del>Floyd</del>
<del>Pikeville Water Works/US Filter</del>	<del>Mile 88.2 of Levisa Fork</del>	<del>Pike</del>
<del>Martin County Water District #1</del>	<del>Mile 23.8 of Tug Fork</del>	<del>Martin</del>
<del>US Filter/Southern Water &amp; Sewer District</del>	<del>Mile 65.4 of Levisa Fork</del>	<del>Floyd</del>
<del>Jenkins Water Works</del>	<del>Mile 0.2 of Little Elkhorn Creek (Elkhorn Lake)</del>	<del>Letcher</del>
<del>Mountain Water District</del>	<del>Mile 4.6 of Russell Fork</del>	<del>Pike</del>
<del>Martin County Water District #1</del>	<del>Mile 23.8 of Tug Fork</del>	<del>Martin</del>
<del>Jenkins Water Works</del>	<del>Mile 24.1 of Elkhorn Creek</del>	<del>Letcher</del>
<del>Little Sandy River Basin</del>		
<del>Grayson Utility Commission</del>	<del>Mile 40.1 of Little Sandy River</del>	<del>Garter</del>
<del>Greenup Water Plant</del>	<del>Mile 0.7 of Little Sandy River</del>	<del>Greenup</del>
<del>Tygarts Creek Basin</del>		
<del>Olive Hill Water Works</del>	<del>Mile 2.2 of Perry Branch (Olive Hill Reservoir)</del>	<del>Garter</del>
<del>Olive Hill Water Works</del>	<del>Mile 81.1 of Tygarts Creek</del>	<del>Garter</del>
<del>Upper Cumberland River Basin</del>		

<del>Water Service Corporation of KY</del>	<del>Mile 3.2 of Little Yellow Creek (Fern Lake)</del>	<del>Bell</del>
<del>Somerset Water Service</del>	<del>Mile 513.6 of Cumberland River (Lake Cumberland)</del>	<del>Pulaski</del>
<del>Corbin City Utilities Commission</del>	<del>Mile 17.3 of Laurel River (City Reservoir)</del>	<del>Laurel</del>
<del>Burnside Water Company</del>	<del>Mile 517.6 of Cumberland River (Lake Cumberland)</del>	<del>Pulaski</del>
<del>Albany Municipal Water Works Plant A</del>	<del>Mile 7.0 of Indian Creek (Lake Cumberland)</del>	<del>Clinton</del>
<del>Monticello Water &amp; Sewer Commission</del>	<del>Mile 502.2 of Cumberland River (Lake Cumberland)</del>	<del>Wayne</del>
<del>London Utility Commission</del>	<del>Mile 1.2 of Indian Camp Creek (Laurel River Reservoir)</del>	<del>Laurel</del>
<del>Harlan Municipal Water Works</del>	<del>Mile 0.2 of Poor Fork</del>	<del>Harlan</del>
<del>Mt Vernon Municipal Water Works</del>	<del>Mile 3.3 of Renfro Creek (Lake Linville)</del>	<del>Reekcastle</del>
<del>Laurel County Water Department #2</del>	<del>Mile 23.9 of Laurel River (Dorthea Dam)</del>	<del>Laurel</del>
<del>McCreary County Water District Plant A</del>	<del>Mile 8.9 of Laurel Creek (Laurel Creek Reservoir)</del>	<del>McCreary</del>
<del>Burkesville Municipal Water Works</del>	<del>Mile 427.05 of Cumberland River</del>	<del>Cumberland</del>
<del>Mekeo Municipal Water Works</del>	<del>Mile 2.3 of Bills Branch (Mekeo City Reservoir)</del>	<del>Jackson</del>
<del>Williamsburg Water Works</del>	<del>Mile 584.15 of Cumberland River</del>	<del>Whitley</del>
<del>Jamestown Municipal Water Works</del>	<del>Mile 3.9 of Greasy Creek Branch (Lake Cumberland)</del>	<del>Russell</del>
<del>Jackson County Water Association Inc</del>	<del>Mile 2.1 of Flat Lick Creek (Beulah [Tyner] Lake)</del>	<del>Jackson</del>
<del>Knox County Utility Commission</del>	<del>Mile 642.61 of Cumberland River</del>	<del>Knox</del>
<del>Wood Creek Water District</del>	<del>Mile 7.2 of Wood Creek (Wood Creek Lake)</del>	<del>Laurel</del>
<del>Cumberland Water Works</del>	<del>Mile 25.2 of Poor Fork</del>	<del>Harlan</del>
<del>Pineville Water System</del>	<del>Mile 3.2 of Cannon Creek (Cannon Creek Lake)</del>	<del>Bell</del>
<del>Benham Water Works</del>	<del>Mile 3.5 of Looney Creek</del>	<del>Harlan</del>
<del>Woodson Bend Resort</del>	<del>Mile 2.98 of South Fork Cumberland River (Lake Cumberland)</del>	<del>Pulaski</del>
<del>Barbourville Utility Commission</del>	<del>Mile 1.3 of Indian Camp Creek (Laurel River Lake)</del>	<del>Laurel</del>

<del>Gawood Water District</del>	<del>Mile 11.0 of Martins Fork</del>	<del>Harlan</del>
<del>Cumberland County Water District</del>	<del>Mile 419.7 of Cumberland River</del>	<del>Cumberland</del>
<del>Ky Parks Cumberland Falls</del>	<del>Mile 562.5 of Cumberland River</del>	<del>Whitley</del>
<del>Barbourville Utility Commission</del>	<del>Mile 635.5 of Cumberland River</del>	<del>Knox</del>
<del>Albany Municipal Water Works Plant B</del>	<del>Mile 6.7 of Indian Creek (Lake Cumberland)</del>	<del>Clinton</del>
<del>McCreary County Water District Plant B</del>	<del>Mile 31.0 of South Fork Cumberland River (Lake Cumberland)</del>	<del>McCreary</del>
<del>Everts Municipal Water Works</del>	<del>Mile 0.1 on UT of Bailey Creek. UT at mile 0.6</del>	<del>Harlan</del>
<del>Everts Municipal Water Works</del>	<del>Mile 1.0 of Bailey Creek</del>	<del>Harlan</del>
<del>Bell County Forestry Camp</del>	<del>Mile 0.2 of Bear Creek (Chenoweth Lake)</del>	<del>Bell</del>
<del>Licking River Basin</del>		
<del>Millersburg Municipal Water Works</del>	<del>Mile 13.3 of Hinkston Creek</del>	<del>Bourbon</del>
<del>Paris Municipal Water Works</del>	<del>Mile 16.7 of Stoner Creek</del>	<del>Bourbon</del>
<del>Northern Ky Water Service District Plant A</del>	<del>Mile 4.8 of Licking River</del>	<del>Kenton</del>
<del>Mt Sterling Water &amp; Sewer System</del>	<del>Mile 36.1 of Slate Creek at mile 36.1 (Reservoir)</del>	<del>Montgomery</del>
<del>Gynthiana Municipal Water Works</del>	<del>Mile 51.2 of South Fork Licking River</del>	<del>Harrison</del>
<del>Flemingsburg Utilities</del>	<del>Mile 0.7 of UT to Town Branch (Flemingsburg Lake)</del>	<del>Fleming</del>
<del>Williamstown Municipal Water</del>	<del>Mile 1.89 of Lake Branch (Lake Williamstown)</del>	<del>Grant</del>
<del>Morehead State University Water Plant</del>	<del>Mile 0.7 of Evans Branch (Evans Branch Impoundment)</del>	<del>Rowan</del>
<del>Morehead State University Water Plant</del>	<del>Mile 13.7 of Triplett Creek</del>	<del>Rowan</del>
<del>Garlsile Municipal Water Plant</del>	<del>Mile 3.5 of UT to Brushy Fork (City Lake)</del>	<del>Nicholas</del>
<del>Falmouth Water Plant</del>	<del>Mile 52.7 of Licking River</del>	<del>Pendleton</del>
<del>Morehead Utility Plant Board</del>	<del>Mile 177.7 of Licking River</del>	<del>Rowan</del>
<del>West Liberty Water Company</del>	<del>Mile 228.6 of Licking River</del>	<del>Morgan</del>

<del>Western Fleming Water District</del>	<del>Mile 102.5 of Licking River</del>	<del>Nicholas</del>
<del>Salersville Municipal Water Works</del>	<del>Mile 273.2 of Licking River</del>	<del>Mageffin</del>
<del>Cynthiana Municipal Water Works</del>	<del>Mile 84.5 of Licking River</del>	<del>Harrison</del>
<del>Flemingsburg Utilities</del>	<del>UT of Town Branch at mile 1.6 (Old Reservoir)</del>	<del>Fleming</del>
<del>Flemingsburg Utilities</del>	<del>Mile 131.8 of Licking River</del>	<del>Fleming</del>
<del>Carlisle Municipal Water Department</del>	<del>Mile 110.2 Licking River</del>	<del>Nicholas</del>
<del>West Liberty Water Company</del>	<del>Mile 3.9 of North Fork Licking River (Cave Run Lake)</del>	<del>Rowan</del>
<del>Cave Run Water Commission</del>	<del>Mile 197.4 of Licking River (Cave Run Lake)</del>	<del>Menifee</del>
<del>Rattlesnake Ridge Water District</del>	<del>Mile 57.4 of Little Sandy River (Crayson Lake)</del>	<del>Elliott</del>
<del>Kentucky River Basin</del>		
<del>Lancaster Municipal Water Works</del>	<del>Mile 145.2 of Kentucky River (Pool #8)</del>	<del>Garrard</del>
<del>Northpoint Training Center</del>	<del>Mile 17.3 of Dix River (Herrington Lake)</del>	<del>Boyle</del>
<del>Frankfort Electric &amp; Water Plant Board</del>	<del>Mile 71.7 of Kentucky River (Pool #4)</del>	<del>Franklin</del>
<del>Hazard Water Department</del>	<del>Mile 104.1 of North Fork Kentucky River</del>	<del>Perry</del>
<del>Wilmore Utilities System</del>	<del>Mile 117.2 of Kentucky River (Pool #6)</del>	<del>Jessamine</del>
<del>Nicholasville Water Works</del>	<del>Mile 157.9 of Kentucky River (Pool #8)</del>	<del>Jessamine</del>
<del>Berea Municipal Utilities</del>	<del>Mile 3.6 of Cowbell Creek Cowbell Lake</del>	<del>Madison</del>
<del>Jackson Municipal Water Works</del>	<del>Mile 47.2 of North Fork Kentucky River</del>	<del>Breathitt</del>
<del>Kentucky American Water Company Plant A</del>	<del>Mile 171.5 of Kentucky River (Pool #9)</del>	<del>Fayette</del>
<del>Kentucky American Water Company Plant B</del>	<del>Mile 10.6 of East Hickman Creek (Reservoir #4)</del>	<del>Fayette</del>
<del>Danville Water Works</del>	<del>Mile 18.9 of Dix River (Herrington Lake)</del>	<del>Boyle</del>
<del>Lawrenceburg Municipal Water Works</del>	<del>Mile 86.2 of Kentucky River</del>	<del>Anderson</del>
<del>Versailles Municipal Water Works</del>	<del>Mile 87.7 of Kentucky River (Pool 5)</del>	<del>Woodford</del>
<del>Harrodsburg Municipal Water</del>	<del>Mile 121.0 of Kentucky</del>	<del>Mercer</del>



Works	River (Pool 7)	
Stanford Water Works	Mile 6.0 of Neals Creek (Rice Lake [Stanford City Reservoir])	Lincoln
Richmond Utilities Board	Mile 206.40 of Kentucky River (Pool 11)	Madison
Whitesburg Municipal Water Works/Veolia Water	Mile 150.9 of North Fork Kentucky River	Letcher
Manchester Water Works	Mile 3.9 of Beech Creek (Bert Combs Lake)	Clay
Georgetown Municipal Water & Sewer	Mile 33.5 of North Elkhorn Creek	Scott
Beattyville Water Works	Mile 1.3 of North Fork Kentucky River (Pool #14)	Lee
Bullock Pen Water District	Mile 2.8 Of Bullock Pen Creek (Bullock Pen Lake)	Grant
Ky Parks Natural Bridge State Park	Mile 0.11 of Mill Creek (Mill Creek Lake)	Powell
Winchester Municipal Utilities	Mile 6.5 of Lower Howard Creek (Winchester Reservoir [Carol E. Eeten Reservoir])	Clark
Winchester Municipal Utilities	Mile 1180.8 of Kentucky River (Pool #10)	Clark
Campton Water Works	Mile 0.3 of Hiram Branch (Campton Lake)	Wolfe
Hyden Leslie County Water District	Mile 75.4 of Middle Fork Kentucky River (Buckhorn Reservoir)	Leslie
Booneville Water & Sewer District	Mile 12.8 of South Fork Kentucky River	Owsley
Georgetown Municipal Water & Sewer	Mile 0.61 of UT (Royal Springs) at mile 33.5 of North Elkhorn Creek	Scott
Owenton Water Works	Mile 0.6 of Severn Creek	Owen
Owenton Water Works	Mile 1.1 of UT to North Severn Creek at mile 5.5 (Lower Thomas Lake)	Owen
Irvine Municipal Utilities	Mile 223.4 of Kentucky River (Pool #11)	Estill
Bluegrass Army Depot	Mile 0.4 of Little Muddy Creek (Lake Vega)	Madison
Beech Fork Water Commission	Mile 0.3 of Beech Fork (Beech Fork Reservoir)	Powell
Berea College Water Utility	Mile 2.1 of East Fork	Madison

	Silver Creek (Lower Silver Creek Lake)	
Berea Municipal Utilities	Mile 2.8 of East Fork Silver Creek (Upper Silver Creek Lake (Kales Lake))	Madison
Berea Municipal Utilities	Mile 2.5 of Owsley Fork (Owsley Fork Lake)	Madison
Manchester Water Works	Mile 18.9 of Goose Creek	Clay
Blackey Municipal Water Works	Mile 131.0 of North Fork Kentucky River	Letcher
Beech Fork Water Commission	Mile 31.0 of Red River	Powell
Salt River Basin		
Shelbyville Municipal Water & Sewer Commission	Mile 28.0 of Guist Creek (Guist Creek Lake)	Shelby
Bardstown Municipal Water Works	Mile 1.1 of Buffalo Creek (Lake Simpson)	Nelson
Lebanon Water Works Company	Mile 98.2 of Rolling Fork River	Marion
Springfield Water Works	Mile 4.2 of Long Lick Creek (Willisburg Lake)	Washington
Lebanon Water Works Company	Mile 1.0 of Fagan Branch (Fagan Branch Reservoir)	Marion
Springfield Water Works	Mile 1.3 of Allen Branch (Springfield Reservoir)	Washington
Green River Basin		
Hidden Valley Springs	Mile 0.4 of Hidden Valley Spring of UT to Rock Creek at mile 5.9	Grayson
Morgantown Utilities Commission	Mile 144.8 of Green River	Butler
Campbellsville Water Works	Mile 1.3 of Trace Fork (City Reservoir)	Taylor
Columbia Utilities Commission	Mile 42.7 of Russell Creek	Adair
Glasgow Water Co./Plant B	Mile 22.4 of Beaver Creek	Barren
Greensburg Municipal Water Works	Mile 283.5 of Green River	Green
Livermore Water Works	Mile 71.9 of Green River	McLean
Elizabethtown Municipal Water Works A	From Old City Spring at mile 10.6 of Valley Creek	Hardin
Elizabethtown Municipal Water Works A	Gaithers Station Spring at mile 6.9 of Valley Creek	Hardin
Bowling Green Municipal Utilities	Mile 38.1 of Barren River	Warren

<del>Green River Valley Water District</del>	<del>Rio Springs at UT to Green River at mile 240.6</del>	<del>Hart</del>
<del>Hodgenville Water Works</del>	<del>Mile 5.8 of North Fork Nolin River</del>	<del>Larue</del>
<del>Hardinsburg/Us Filter</del>	<del>Tules Creek at mile 1.2 (Rough River Reservoir)</del>	<del>Breckinridge</del>
<del>Central City Municipal Water &amp; Sewer</del>	<del>Mile 86.0 of Green River</del>	<del>Muhlenberg</del>
<del>Calhoun Water Works</del>	<del>Mile 63.9 of Green River</del>	<del>McLean</del>
<del>Hartford Municipal Water Works</del>	<del>Mile 29.8 of Rough River</del>	<del>Ohio</del>
<del>Greenville Utilities Commission</del>	<del>Luzerne Lake (Luzerne Lake no longer connected to Caney Creek at mile 2.3)</del>	<del>Muhlenberg</del>
<del>Ohio County Water Plant</del>	<del>Mile 131.9 of Green River</del>	<del>Ohio</del>
<del>Franklin Water Plant</del>	<del>Mile 23.4 of West Fork Drake's Creek</del>	<del>Simpson</del>
<del>Glasgow Water Co/Plant A</del>	<del>Mile 86.8 of Barren River (Barren River Reservoir)</del>	<del>Barren</del>
<del>Leitchfield Municipal Water Works</del>	<del>Mile 107.7 of Rough River (Reservoir)</del>	<del>Grayson</del>
<del>Campbellsville Water Works</del>	<del>Mile 5.3 of Robinson Creek (Green River Reservoir)</del>	<del>Taylor</del>
<del>Edmonson County Water District</del>	<del>Mile 183.7 of Green River</del>	<del>Edmonson</del>
<del>Elizabethtown Municipal Water Works B</del>	<del>Mile 2.1 of Freeman Creek (Freeman Lake)</del>	<del>Hardin</del>
<del>Tompkinsville Municipal Water Works</del>	<del>Mile 6.0 of Mill Creek (Mill Creek Reservoir)</del>	<del>Monroe</del>
<del>Madisonville Municipal Water Works</del>	<del>Mile 54.1 of Green River</del>	<del>Hopkins</del>
<del>Liberty Water Works</del>	<del>Mile 0.9 of Hickman Creek (Lake Liberty)</del>	<del>Casey</del>
<del>City of Lafayette (Tennessee)</del>	<del>Mile 118.4 of Barren River</del>	<del>Monroe</del>
<del>Stanford Water Works</del>	<del>Mile 0.6 of UT to Green River (James C. Harris Reservoir)</del>	<del>Lincoln</del>
<del>Hardin County Water District #2</del>	<del>Nolin River at mile 75.3 (White Mills Spring)</del>	<del>Hardin</del>
<del>Green River Valley Water District</del>	<del>Mile 240.6 of Green River</del>	<del>Hart</del>
<del>Scottsville Municipal Water Works</del>	<del>Mile 88.6 of Barren River (Barren River Lake)</del>	<del>Allen</del>
<del>Butler County Water System</del>	<del>Mile 143.8 of Green River</del>	<del>Butler</del>
<del>Edmonson County Water District</del>	<del>Mile 23.5 of Nolin River</del>	<del>Grayson</del>

	<del>(Nolin Reservoir)</del>	
Columbia Utilities Commission	Mile 317.5 of Green River <del>(Green River Reservoir)</del>	Adair
Henderson Water & Sewer Department	From UT at mile 0.6 to Grane Creek	Webster
Webster Cnty Water District	Mile 47.5 of Green River	Webster
Hodgenville Water Works	Mile 0.3 of UT at mile 8.1 of North Fork Nolin River <del>(Salem Lake)</del>	Larue
Grayson County Water District	Mile 97.7 of Rough River <del>(Rough River Reservoir)</del>	Grayson
Lower Cumberland River Basin		
Kentucky State Penitentiary	Mile 40.2 of Cumberland River <del>(Lake Barkley)</del>	Lyon
Hopkinsville Water Environmental Authority	Mile 14.2 of North Fork Little River	Christian
Eddyville Municipal Water Works	Mile 1.5 of Knob Creek <del>(Lake Barkley)</del>	Lyon
Princeton Water Department	Mile 41.9 of Cumberland River <del>(Lake Barkley)</del>	Lyon
Kuttawa Municipal Water Plant	Mile 37.9 of Cumberland River <del>(Lake Barkley)</del>	Lyon
Barkley Lake Water District	Mile 0.7 of Hopson Creek <del>(Lake Barkley)</del>	Trigg
Grittenden Livingston Co Water District	Mile 14.0 of Cumberland River	Livingston
Hopkinsville Water Environmental Authority	From Hopkinsville Stone Quarry No. 1 (South Quarry) adjacent to North Fork Little River at mile 14.8	Christian
Gadiz Water Company	Mile 13.5 of Little River	Trigg
Hopkinsville Water Environmental Authority	Hopkinsville Stone Quarry No. 2 (North Quarry) adjacent to White Creek at mile 0.2	Christian
TVA Land Between The Lakes, Wrangler	Mile 1.0 on UT of Lick Creek at mile 1.1	Trigg
Eddyville Municipal Water Works	Mile 40.2 of Cumberland River <del>(Lake Barkley)</del>	Lyon
Tradewater River Basin		
Providence Water Works	Mile 0.3 of Owens Creek <del>(New Providence City)</del>	Webster

	Lake)	
Madisonville Municipal Water Works	Mile 6.3 of Greasy Creek (Lake Pewee)	Hopkins
Earlington Water Works	Mile 0.2 of UT to Clear Creek at mile 26.5 (Loch Mary Reservoir)	Hopkins
Dawson Springs City Water & Sewer	Mile 0.1 of Piney Creek (Lake Beshear)	Galdwell
Providence Municipal Water Works	Mile 41.3 of Tradewater River	Webster
Ohio River Basin (Main Stem And Minor Tributaries (Note: river miles follow the USGS convention of starting mileage beginning at Pittsburgh, PA and ending at river mouth))		
Maysville Utility Commission	Mile 408.5 of Ohio River	Mason
Ashland Municipal Water Works	Mile 319.68 of Ohio River	Beyd
Northern Ky Water Service District Newport Plant	Mile 463.6 of Ohio River	Campbell
Paducah Water Works	Mile 935.6 of Ohio River	McCracken
Louisville Water Company /ZPS A	Mile 600.6 of Ohio River	Jefferson
Henderson Water & Sewer Department	Mile 803.6 of Ohio River	Henderson
Northern Ky Water Service District Plant B	Mile 462.7 of Ohio River	Campbell
Morganfield Municipal Water Works	Mile 840.0 of Ohio River	Union
Russell Water Plant	Mile 327.7 of Ohio River	Greenup
Marion Municipal Water Works	Mile 26.4 of Crooked Creek (City Lake)	Grittenden
US Army Ft Knox A	Mile 8.6 of Otter Creek	Meade
Louisville Water Company BEPWTP B	Mile 594.7 of Ohio River	Jefferson
Sturgis Municipal Water Works	Mile 871.4 of Ohio River	Union]

(3)(a) Table C in this subsection lists waters that have:

1. A designated use of CAH or OSRW; or
2. Exceptions to specific criteria in 401 KAR 10:031.

(b) All other criteria in 401 KAR 10:031 applicable to the listed use designations shall apply to surface waters listed in Table C in this subsection.

(c)1. DWS use shall apply to all waters listed in Table C in this section.

2. DWS use criteria found in 401 KAR 10:031, Section 6, shall apply only at the surface water intakes listed in Table B of this section.

Table C: SURFACE WATER USE DESIGNATIONS				
Stream	Zone (Descriptive and water	County	Use Designation	Exceptions to

	body or segment river miles [RM]]			Specific Criteria
<b>BIG SANDY RIVER BASIN</b>				
Hobbs Fork of Pigeonroost Fork of Wolf Creek	Mouth to Headwaters (0.0-3.9)	Martin	WAH, PCR, SCR, OSRW	
Lower Pigeon Branch of Elkhorn Creek	Left Fork to Headwaters (0.6-1.9)	Pike	WAH, PCR, SCR, OSRW	
Paint Creek of Levisa Fork	Levisa Fork (0.0-8.3)	Johnson	CAH, PCR, SCR	
Russell Fork of Levisa Fork of Big Sandy River	Clinch Field RR Yard off HWY 80 to Virginia State Line (15.0-16.5)	Pike	WAH, PCR, SCR, OSRW	
Toms Branch of Elkhorn Creek	Mouth to Headwaters (0.0-1.6)	Pike	WAH, PCR, SCR, OSRW	
Unidentified Tributary of Hobbs Fork	Hobbs Fork of Pigeonroost Fork to Headwaters (0.0-0.55)	Martin	WAH, PCR, SCR, OSRW	
<b>LAKES AND RESERVOIRS</b>				
Paintsville	Entire reservoir	Johnson	WAH, CAH, PCR, SCR	
<b>LITTLE SANDY RIVER BASIN</b>				
Arabs Fork of Big Sinking Creek	Clay Fork to Headwaters (0.0-5.1)	Elliott	WAH, PCR, SCR, OSRW	
Big Caney Creek	Grayson Lake to source (1.8-15.3)	Elliott/ Rowan	CAH, PCR, SCR, OSRW	
Big Sinking Creek of Little Sandy River	SR 986 to Clay Fork and Arab Fork (6.1-15.2)	Carter/ Elliott	WAH, PCR, SCR, OSRW	
Laurel Creek of Little Sandy River	Little Sandy River to Carter School Rd (0.0-7.6)	Elliott/ Rowan	CAH, PCR, SCR,	
Laurel Creek of Little Sandy River	Carter School Rd Bridge to Headwaters (7.6-14.7)	Elliott/ Rowan	CAH, PCR, SCR, OSRW	
Meadow Branch of Little Fork of Little Sandy River	Mouth to Headwaters (0.0-1.4)	Elliott	WAH, PCR, SCR, OSRW	
Middle Fork of Little Sandy River	Mouth to Sheepskin Branch (0.0-3.4)	Elliott	WAH, PCR, SCR, OSRW	
Nichols Fork of Little Fork of Little Sandy River	Green Branch to Headwaters (0.0-2.0)	Elliott	WAH, PCR, SCR, OSRW	
<b>LAKES AND RESERVOIRS</b>				
Greenbo	Entire Reservoir	Greenup	WAH, CAH, PCR, SCR	
<b>LICKING RIVER BASIN</b>				
Blackwater Creek of Licking River	Eaton Creek to Greasy Fork (3.8-117)	Morgan	WAH, PCR, SCR, OSRW	
Blanket Creek of Licking River	Mouth to Unidentified Tributary (0.0-1.9)	Pendleton	WAH, PCR, SCR, OSRW	
Botts Fork of Brushy Fork of Licking River	Mouth to Landuse Change (0.0-2.1)	Menifee	WAH, PCR, SCR, OSRW	
Bowman Creek	Mouth to Unidentified Tributary (0.0-6.0)	Kenton	WAH, PCR, SCR, OSRW	
Brushy Fork of Meyers Creek	Cave Run Lake Backwaters to Headwaters (0.7-5.6)	Menifee	WAH, PCR, SCR, OSRW	
Brushy Fork of South Fork of Grassy Creek	Mouth to Headwaters (0.0-5.8)	Pendleton	WAH, PCR, SCR, OSRW	
Bucket Branch of North Fork of Licking River	Mouth to Headwaters (0.0-1.9)	Morgan	WAH, PCR, SCR, OSRW	
Cedar Creek of Licking River	Mouth to North Branch of Cedar Creek (0.0-1.7)	Robertson	WAH, PCR, SCR, OSRW	
Craney Creek	Source to North Fork of Licking River (0.0-11.2)	Rowan/ Morgan	CAH, PCR, SCR, OSRW	
Devils Fork of North Fork of Licking River	Mouth to Headwaters (0.0-8.5)	Elliott/ Morgan	WAH, PCR, SCR, OSRW	
Flour Creek of Licking River	Mouth to Unidentified Tributary (0.0-2.2)	Pendleton	WAH, PCR, SCR, OSRW	
Grovers Creek of Kincaid Creek	Kincaid Lake Backwaters to Unidentified Tributary (0.5-3.4)	Bracken/ Pendleton	WAH, PCR, SCR, OSRW	
Licking River	River Mile 175.6 (U.S. Highway 60 Bridge) to River Mile 180.8 (Cave	Bath/ Rowan	CAH, PCR, SCR	

	Run Lake Dam (175.6-180.8)			
Licking River	River Mile 159.5 [4] (Hwy 211) to River Mile 170.6 (Unnamed Road off Slatey Point Road)	Bath/ Rowan/ Fleming	WAH, PCR, SCR, OSRW	
Licking River	River Mile 19.3 (Hwy 536 Bridge) to River Mile 117.6 (1.3 river miles above Fishtrap Creek)	Kenton/ Campbell/ Pendleton/ Harrison/ Robertson/ Fleming	WAH, PCR, SCR, OSRW	
Minor Creek of Craney Creek	Mouth to river mile 2.8 (0.0-2.8)	Morgan/ Rowan	CAH, PCR, SCR	
North Fork of Licking River	Cave Run Lake Backwaters to Devils Fork (8.4-13.4)	Morgan	WAH, PCR, SCR, OSRW	
Sawyers Fork of Cruises Creek	Mouth to Headwaters (0.0-3.3)	Kenton	WAH, PCR, SCR, OSRW	
Slabcamp Creek of Craney Creek of Licking River	Mouth to Headwaters (0.0-3.7)	Rowan	CAH, PCR, SCR, OSRW	
Slate Creek of Licking River	Mouth to Mill Creek (0.0-13.55)	Bath	WAH, PCR, SCR, OSRW	
South Fork Grassy Creek of Grassy Creek of Licking River	Mouth to Greasy Creek (0.0-19.8)	Kenton/ Pendleton	WAH, PCR, SCR, OSRW	
Unidentified Tributary of Shannon Creek of North Fork of Licking River	Mouth to Headwaters (0.0-2.2)	Mason	WAH, PCR, SCR, OSRW	
Welch Fork of Brushy Fork of Licking River	Mouth to First Unnamed Tributary (0.0-1.0)	Menifee	WAH, PCR, SCR, OSRW	
West Creek of Licking River	Mouth to Headwaters (0.0-9.8)	Harrison/ Robertson	WAH, PCR, SCR, OSRW	
KENTUCKY RIVER BASIN				
Backbone Creek of Sixmile Creek of Kentucky River	Mouth to Scrabble Creek (0.0-1.65)	Franklin/ Henry/ Shelby	WAH, PCR, SCR, OSRW	
Bear Branch of North Fork of Kentucky River	Above Sediment Pond to Headwaters (0.3-1.2)	Perry	WAH, PCR, SCR, OSRW	
Big Double Creek of Red Bird River	Mouth to Confluence of Left and Right Forks of Big Double Creek (0.0-4.04)	Clay	WAH, PCR, SCR, OSRW	
Bill Branch of Laurel Fork of Greasy Creek	Mouth to Right Fork and Left Fork Creek (0.0-0.3)	Leslie	WAH, PCR, SCR, OSRW	
Billey Fork of Millers Creek	Land Use Change to Headwaters (2.6-8.8)	Lee/Elliott	WAH, PCR, SCR, OSRW	
Bill Oak Branch of Left Fork of Buffalo Creek	Mouth to Headwaters (0.0-0.3)	Owsley	WAH, PCR, SCR, OSRW	
Buffalo Creek of South Fork of Kentucky River	Mouth to Right Fork and Left Fork (0.0-1.6)	Owsley	WAH, PCR, SCR, OSRW	
Cavanaugh Creek	South Fork of Station Camp Creek to Foxtown Rd (0.0-8.3)	Jackson	WAH, PCR, SCR, OSRW	
Cherry Run of Boyd Run of North Elkhorn Creek	Mouth to Boyd Run (0.0-0.9)	Scott	WAH, PCR, SCR, OSRW	
Chester Creek of Middle Fork of Red River	Mouth to Headwaters (0.0-2.8)	Wolfe	WAH, PCR, SCR, OSRW	
Chimney Top Creek of Red River	Basin (0.0-4.6)	Wolfe	CAH, PCR, SCR	
Clear Creek of Kentucky River	Mouth to East Fork Clear Creek (0.0-9.0)	Woodford	WAH, PCR, SCR, OSRW	
Clemons Fork of Buckhorn Creek	Mouth to Headwaters (0.0-4.8)	Breathitt	WAH, PCR, SCR, OSRW	
Coles Fork of Buckhorn Creek	Mouth to Headwaters (0.0-6.2)	Breathitt	WAH, PCR, SCR, OSRW	
Craig Creek of Kentucky River	Mouth (Kentucky River Backwaters) to Unidentified Tributary (0.0-2.7)	Woodford	WAH, PCR, SCR, OSRW	
Deep Ford Branch of Cutshin Creek	Above Pond to Headwaters (0.3-1.35)	Leslie	WAH, PCR, SCR, OSRW	
Dix River	Mouth (Kentucky River) to River Mile 3.1 (Herrington Lake Dam) (0.0-3.1)	Garrard/ Mercer	CAH, PCR, SCR	
Dog Fork of Swift Camp Creek	Basin	Wolfe	CAH, PCR, SCR	
Drennon Creek of	Fivemile Creek to Town Branch	Henry	WAH, PCR, SCR,	

Kentucky River	(8.7-12.2)		OSRW	
East Fork of Indian Creek of Indian Creek of Red River	Headwaters East Fork of Indian Creek to Indian Creek (0.0-9.0)	Menifee	CAH, PCR, SCR, OSRW	
Elisha Creek of Red Bird River	Land Use Change (Residential) to the confluence of Right Fork and Middle Fork Elisha Creek (0.8-1.8)	Leslie	WAH, PCR, SCR, OSRW	
Emily Run of Drennon Creek	Mouth to Unidentified Tributary (0.0-4.0)	Henry	WAH, PCR, SCR, OSRW	
Evans Fork of Billey Fork of Millers Creek	Mouth to Headwaters (0.0-3.0)	Estill	WAH, PCR, SCR, OSRW	
Falling Rock Branch of Clemons Fork of Buckhorn Creek	Mouth to Headwaters (0.0-0.7)	Breathitt	WAH, PCR, SCR, OSRW	
Gilberts Creek of Kentucky River	Mouth to Unidentified Tributary (0.0-2.6)	Anderson	WAH, PCR, SCR, OSRW	
Gladie Creek of Red River	Basin	Menifee	CAH, PCR, SCR	
Gladie Creek of Red River	Land Use Change to Long Branch (0.5-7.25)	Menifee	CAH, PCR, SCR, OSRW	
Goose Creek of South Fork of Kentucky River	Mouth to Laurel Creek (0.0-9.1)	Clay/Leslie	WAH, PCR, SCR, OSRW	
Griers Creek of Kentucky River	Kentucky River Backwaters to Unidentified Tributary (0.1-3.5)	Woodford	WAH, PCR, SCR, OSRW	
Grindstone Creek of Kentucky River	Kentucky River Backwaters to Headwaters (0.1-1.9)	Franklin	WAH, PCR, SCR, OSRW	
Hardwick Creek of Red River	Mouth to Little Hardwick Creek (0.0-3.25)	Powell	WAH, PCR, SCR, OSRW	
Hell For Certain of Middle Fork of Red River	Mouth to Big Fork (0.0-2.1)	Leslie	WAH, PCR, SCR, OSRW	
Hines Creek of Kentucky River	Kentucky River Backwaters to confluence with Unidentified Tributary (0.1-1.9)	Madison	WAH, PCR, SCR, OSRW	
Honey Branch of Greasy Creek of Middle Fork of Kentucky River	Mouth to Headwaters (0.0-1.35)	Leslie	WAH, PCR, SCR, OSRW	
Hopper Cave Branch of Cavanaugh Creek	Mouth to Headwaters (0.0-1.8)	Jackson	WAH, PCR, SCR, OSRW	
Indian Creek of Eagle Creek	Mouth to Headwaters (0.0-5.4)	Carroll	WAH, PCR, SCR, OSRW	
Indian Creek of Red River	River Mile 1.25 (East Fork of Indian Creek) to River Mile 5.2 (0.3 river miles below Bear Branch)	Menifee	CAH, PCR, SCR	
Indian Fork of Sixmile Creek of Kentucky River	Mouth to Headwaters (0.0-3.3)	Shelby	WAH, PCR, SCR, OSRW	
John Carpenter Fork of Clemons Fork of Buckhorn Creek	Mouth to Headwaters (0.0-1.2)	Breathitt	WAH, PCR, SCR, OSRW	
Katies Creek of Red Bird River	Mouth to Headwaters (0.0-4.0)	Clay	WAH, PCR, SCR, OSRW	
Laurel Fork of Left Fork Buffalo Creek of Buffalo Creek	Cortland Fork to Big Branch (0.0-3.75)	Owsley	WAH, PCR, SCR, OSRW	
Left Fork of Big Double Creek of Kentucky River	Mouth to Headwaters (0.0-1.5)	Clay	WAH, PCR, SCR, OSRW	
Line Fork of North Fork of Kentucky River	Defeated Creek to Headwaters (12.2-28.6)	Letcher	WAH, PCR, SCR, OSRW	
Little Middle Fork of Elisha Creek of Red Bird River	Mouth to Headwaters (0.0-0.75)	Leslie	WAH, PCR, SCR, OSRW	
Little Millseat Branch of Clemons Fork of Buckhorn Creek	Mouth to Headwaters (0.0-1.2)	Breathitt	WAH, PCR, SCR, OSRW	
Little Sixmile Creek of Sixmile Creek of Kentucky River	Mouth to Headwaters (0.0-5.3)	Henry	WAH, PCR, SCR, OSRW	
Lower Howard Creek of Kentucky River	Mouth to West Fork (0.5- 6.6)	Clark	WAH, PCR, SCR, OSRW	
Lulbegrud Creek of Red River	Mouth to Falls Branch (0.0-7.3)	Clark/ Powell	WAH, PCR, SCR, OSRW	
Middle Fork of Kentucky	Mouth to Upper Twin Creek (0.0-	Lee/ Owsley	WAH, PCR, SCR,	



River	12.7)		OSRW	
Middle Fork of Kentucky River	Hurts Creek to Greasy Creek (75.6-85.8)	Leslie	WAH, PCR, SCR, OSRW	
Middle Fork of Red River	River Mile 10.7 (0.7 river miles below Sinking Fork) to Headwaters (15.3)	Powell	CAH, PCR, SCR	
Middle Fork of Red River	South Fork of Red River to Natural Bridge State Park Lake (1.8-7.2)	Powell	CAH, PCR, SCR, OSRW	
Mikes Branch of Laurel Fork of Left Fork of Buffalo Creek	Mouth to Headwaters (0.0-0.7)	Owsley	WAH, PCR, SCR, OSRW	
Mill Creek of Kentucky River	Near Mouth to Headwaters (0.0-1.85)	Owen	WAH, PCR, SCR, OSRW	
Millseat Branch of Clemons Fork of Buckhorn Creek	Mouth to Headwaters (0.0-1.85)	Breathitt	WAH, PCR, SCR, OSRW	
Muddy Creek of Kentucky River	Elliston, Kentucky to Viney Fork (13.8-20.65)	Madison	WAH, PCR, SCR, OSRW	
Musselman Creek of Eagle Creek	Mouth to Headwaters (0.0-9.0)	Grant	WAH, PCR, SCR, OSRW	
Parched Corn Creek	Source to Red River (0.0-2.25)	Wolfe	CAH, PCR, SCR	
Red River	River Mile 70.4 (SR 746) to River Mile 50.3 (0.1 Miles below Auxier Branch)	Menifee/ Wolfe	WAH, PCR, SCR, OSRW	
Red Bird River of South Fork of Kentucky River	Mouth to Big Creek (0.0-15.3)	Clay	WAH, PCR, SCR, OSRW	
Right Fork of Buffalo Creek of Kentucky River	Mouth to Headwaters (0.0-2.1)	Owsley	WAH, PCR, SCR, OSRW	
Right Fork of Elisha Creek of Redbird River	Mouth to Headwaters (0.0-3.3)	Leslie	WAH, PCR, SCR, OSRW	
Roaring Fork of Lewis Fork of Buckhorn Creek	Mouth to Headwaters (0.0-0.9)	Breathitt	WAH, PCR, SCR, OSRW	
Rock Lick Creek	Mouth to Headwaters (0.0-9.6)	Jackson	WAH, PCR, SCR, OSRW	
Sand Ripple Creek of Kentucky River	Kentucky River Backwaters to Headwaters (0.1-3.9)	Henry	WAH, PCR, SCR, OSRW	
Severn Creek of Kentucky River	Kentucky River Backwaters to North Fork of Severn Creek (1.35-3.0)	Owen	WAH, PCR, SCR, OSRW	
Shaker Creek of Kentucky River	Near Mouth to Shawnee Run (0.1-1.4)	Mercer	WAH, PCR, SCR, OSRW	
Shelly Rock Fork of Millseat Branch of Clemons Fork	Mouth to Headwaters (0.0-0.6)	Breathitt	WAH, PCR, SCR, OSRW	
Sixmile Creek of Kentucky River	Little Sixmile Creek to Dam (7.1-15.3)	Henry	WAH, PCR, SCR, OSRW	
South Fork of Kentucky River	Mouth to Sexton Creek (0.0-27.8)	Owsley	WAH, PCR, SCR, OSRW	
South Fork of Red River	Mouth to Sandlick Fork (0.0-4.2)	Powell	WAH, PCR, SCR, OSRW	
South Fork of Station Camp Creek of Kentucky River	Mouth to Rock Lick Creek (0.0-9.7)	Jackson	WAH, PCR, SCR, OSRW	
Spruce Branch of Redbird River	Mouth to Headwaters (0.0-1.0)	Clay	WAH, PCR, SCR, OSRW	
Station Camp Creek of Kentucky River	Landuse Change (Crooked Cr.) to South Fork of Station Camp Creek (3.3-22.7)	Estill	WAH, PCR, SCR, OSRW	
Steeles Run of Elkhorn Creek	Mouth to Unidentified Tributary (0.0-4.2)	Fayette	WAH, PCR, SCR, OSRW	
Steer Fork of War Fork of Station Camp Creek	Mouth to Headwaters (0.0-2.7)	Jackson	CAH, PCR, SCR, OSRW	
Sturgeon Creek of Kentucky River	Duck Fork to Little Sturgeon Creek (1.3-13.7)	Lee/ Owsley	WAH, PCR, SCR, OSRW	
Sugar Creek of Redbird River	Landuse Change to Headwaters (0.6-5.4)	Leslie	WAH, PCR, SCR, OSRW	
Sulphur Lick Creek of Elkhorn Creek	Mouth to Headwaters (0.0-5.2)	Franklin	WAH, PCR, SCR, OSRW	
Swift Camp Creek	Red River to Source (0.0-13.9)	Wolfe	CAH, PCR, SCR	
Unidentified Tributary of Cawood Branch of Beech Fork	Mouth to Headwaters (0.0-2.1)	Leslie	WAH, PCR, SCR, OSRW	

Unidentified Tributary of Cedar Creek of Kentucky River	Mouth to Headwaters (0.0-1.4)	Owen	WAH, PCR, SCR, OSRW	
Unidentified Tributary of Glenns Creek of Kentucky River	Mouth to Headwaters (0.0-1.9)	Woodford	WAH, PCR, SCR, OSRW	
Unidentified Tributary of Jacks Creek of Kentucky River	Mouth to Headwaters (0.0-1.15)	Madison	WAH, PCR, SCR, OSRW	
Unidentified Tributary of Kentucky River	Mouth at Kentucky River Backwaters to Land Use Change (0.1-1.4)	Franklin	WAH, PCR, SCR, OSRW	
Unidentified Tributary of Line Fork of North Fork of Kentucky River (LCW)	Mouth to Headwaters (0.0-0.6)	Letcher	WAH, PCR, SCR, OSRW	
War Fork of Station Camp Creek	Mouth to Headwaters (0.0-13.8)	Jackson	CAH, PCR, SCR, OSRW	
War Fork of Station Camp Creek	Basin above River Mile 1.9 (0.3 river miles below—Tarpin Lick Branch (2.5))	Jackson	CAH, PCR, SCR	
Watches Fork of Laurel Fork of Left Fork of Buffalo Creek	Mouth to Headwaters (0.0-1.0)	Owsley	WAH, PCR, SCR, OSRW	
Wolfpen Creek of Red River	Mouth to Headwaters (0.0-3.6)	Menifee	WAH, PCR, SCR, OSRW	
<b>LAKES AND RESERVOIRS</b>				
Bert Combs	Entire Reservoir	Clay	WAH, CAH, PCR, SCR	
Fishpond	Entire Reservoir	Letcher	WAH, CAH, PCR, SCR	
Mill Creek	Entire Reservoir	Wolfe	WAH, CAH, PCR, SCR	
<b>SALT RIVER BASIN</b>				
Brashears Creek of Salt River	Guist Creek to Bullsken and Clear Creek (13.0-25.9)	Shelby/ Spencer	WAH, PCR, SCR, OSRW	
Cedar Creek of Salt River	Mouth to Greens Branch (0.0-5.2)	Bullitt	WAH, PCR, SCR, OSRW	
Chaplin River of Salt River	Thompson Creek to Cornishville, KY (40.9-54.2)	Washington	WAH, PCR, SCR, OSRW	
Doctors Fork of Chaplin River	Mouth to Begley Branch (0.0-3.8)	Boyle	WAH, PCR, SCR, OSRW	
Guist Creek of Brashears Creek	Mouth to Jephtha Creek (0.0-15.7)	Spencer	WAH, PCR, SCR, OSRW	
Harts Run of Wilson Creek of Rolling Fork of Salt River	Mouth to Headwaters (0.0-1.8)	Bullitt	WAH, PCR, SCR, OSRW	
Indian Creek of Thompson Creek of Chaplin River of Salt River	Mouth to Unidentified Tributary (0.0-2.9)	Mercer	WAH, PCR, SCR, OSRW	
Lick Creek of Long Lick Creek of Beech Fork of Salt River	Mouth to 0.1miles below Dam (0.0-4.1)	Washington	WAH, PCR, SCR, OSRW	
Otter Creek of Rolling Fork of Salt River	Landuse Change to confluence of East Fork and Middle Fork Otter Creek (1.7-2.9)	Larue	[G] WAH, PCR, SCR, OSRW	
Overalls Creek of Wilson Creek of Rolling Fork of Salt River	Mouth to Headwaters of Middle Fork of Overalls Creek (0.0-3.2)	Bullitt	WAH, PCR, SCR, OSRW	
Paddy's Run	Mouth (Ohio River) to headwaters	Jefferson	PCR, SCR	401 KAR 10:031, Section 2(1)(d) and 2(2) do not apply.
Rolling Fork of Salt River	River Mile 53.6 (0.8 mi upstream of Stiles Rd Bridge) to River Mile 62.5 (0.5 mi upstream of Otter Cr)	Larue/ Nelson	WAH, PCR, SCR, OSRW	
Salt Lick Creek of Rolling Fork of Salt River	Mouth to Headwaters (0.0-8.6)	Larue, Marion	WAH, PCR, SCR, OSRW	
Sulphur Creek of Chaplin River	Mouth to confluence of Cheese Lick and Brush Creek (0.0-10.0)	Anderson/ Mercer/ Washington	WAH, PCR, SCR, OSRW	
Unidentified Tributary of Glens Creek of Chaplin	Mouth to Headwaters (0.0-2.3)	Washington	WAH, PCR, SCR, OSRW	

River				
West Fork of Otter Creek of Rolling Fork of Salt River	Mouth to Headwaters (0.0-5.1)	Larue	WAH, PCR, SCR, OSRW	
Wilson Creek of Rolling Fork of Salt River	Mouth to Headwaters (0.0-18.4)	Bullitt/ Nelson	WAH, PCR, SCR, OSRW	
GREEN RIVER BASIN				
Barren River	Green River to River Mile Lock and Dam #1 to Green River (0.0-15.1)	Butler/ Warren	WAH, PCR, SCR, OSRW	
Beaverdam Creek	Source to Green River (14.5-0.0)	Edmonson	CAH, PCR, SCR, OSRW	
Cane Run of Nolin River	Nolin River Lake Backwaters to Headwaters (0.8-6.5)	Hart	WAH, PCR, SCR, OSRW	
Caney Fork of Peter Creek	Mouth to Headwaters (0.0-6.7)	Barren	WAH, PCR, SCR, OSRW	
Clifty Creek of Rough River	Barton Run to Western Kentucky Parkway (7.5-17.3)	Grayson	WAH, PCR, SCR, OSRW	
Clifty Creek of Wolf Lick Creek	Little Clifty Creek to Sulphur Lick (0.0-13.4)	Todd	WAH, PCR, SCR, OSRW	
Double Sink Spring	Basin Outside Mammoth Cave National Park Boundary	Edmonson/ Barren	CAH, PCR, SCR, OSRW	
East Fork of Little Barren River	Red Lick Creek to Flat Creek (18.9-20.6)	Metcalf	WAH, PCR, SCR, OSRW	
Echo River	Basin Outside Mammoth Cave National Park Boundary (underground system)	Edmonson	CAH, PCR, SCR, OSRW	
Ellis Fork of Damron Creek	Mouth to Headwaters (0.0-2.2)	Adair/ Russell	WAH, PCR, SCR, OSRW	
Falling Timber Creek of Skaggs Creek	Landuse Change to Headwaters (10.8-15.2)	Barren/ Metcalf	WAH, PCR, SCR, OSRW	
Fiddlers Creek of North Fork of Rough River	Mouth to Headwaters (0.0-5.9)	Breckinridge	WAH, PCR, SCR, OSRW	
Forbes Creek of Buck Creek of East Fork of Pond River	Mouth to Unidentified Tributary (0.0-4.1)	Christian	WAH, PCR, SCR, OSRW	
Ganter Spring	Basin Outside Mammoth Cave National Park Boundary	Edmonson	CAH, PCR, SCR, OSRW	
Gasper River of Barren River	Clear Fork to Wiggington Creek (17.2-35.6)	Logan/ Warren	WAH, PCR, SCR, OSRW	
Goose Creek of Green River	Mouth to Little Goose Creek (0.0-8.5)	Casey/ Russell	WAH, PCR, SCR, OSRW	
Green River	River Mile 210.6 (eastern Mammoth Cave National Park Boundary to River Mile 309.1 (Green River Lake Dam)	Hart/Taylor/ Green	WAH, PCR, SCR, OSRW	
Green River	River Mile 185.0 (western Mammoth Cave National Park Boundary) to River Mile 210.6 (eastern Mammoth Cave National Park Boundary)	Edmonson/ Hart	WAH, PCR, SCR, OSRW	
Green River	Downstream Mammoth Cave National Park Boundary to Lynn Camp Creek (185.0-250.3)	Edmonson/ Hart	WAH, PCR, SCR, OSRW	
Green River	River Mile 149.7 (1.0 river mile below Lock and Dam #4) to River Mile 170.2 (Lock and Dam #5)	Butler/ Warren	WAH, PCR, SCR, OSRW	
Halls Creek of Rough River	Unidentified Tributary to Headwaters (4.8-9.6)	Ohio	WAH, PCR, SCR, OSRW	
Lick Creek of West Fork of Drakes Creek	Mouth to Headwaters (0.0-10.2)	Simpson	CAH, PCR, SCR, OSRW	
Linders Creek of Rough River	Mouth to Sutzer Creek (0.0-7.9)	Hardin	WAH, PCR, SCR, OSRW	
Little Beaverdam Creek of Green River	Mouth to SR 743 (0.0-11.4)	Edmonson/ Warren	WAH, PCR, SCR, OSRW	
Little Short Creek of Rough River	Mouth to Headwaters (0.0-3.1)	Grayson	WAH, PCR, SCR, OSRW	
Lynn Camp Creek	Green River to Source (0.0-8.3)	Hart	CAH, PCR, SCR	
Lynn Camp Creek of Green River	Mouth to Lindy Creek (0.0-8.5)	Hart	CAH, PCR, SCR, OSRW	
McFarland Creek of West Fork of Pond River	Grays Branch to Unidentified Tributary (1.5-5.0)	Christian	WAH, PCR, SCR, OSRW	
McCoy Spring	Basin Outside Mammoth Cave	Hart	CAH, PCR, SCR,	

	National Park Boundary		OSRW	
Meeting Creek of Rough River	Little Meeting Creek to Petty Branch (5.2-14.0)	Grayson/ Hardin	WAH, PCR, SCR, OSRW	
Mile 205.7 Spring	Basin Outside Mammoth Cave National Park Boundary	Hart	CAH, PCR, SCR, OSRW	
Muddy Creek of Caney Creek of Rough River	Landuse Change to Headwaters (13.5-15.5)	Ohio	WAH, PCR, SCR, OSRW	
Nolin River	River Mile 7.7 (Nolin Lake Dam) to Green River (0.0-7.7)	Edmonson	CAH, WAH, PCR, SCR	
North Fork of Rough River	Buffalo Creek to Reservoir Dam (22.1 -26.9)	Breckinridge	WAH, PCR, SCR, OSRW	
Peter Creek of Barren River	Caney Fork to Dry Fork (11.6-18.5)	Barren	WAH, PCR, SCR, OSRW	
Pike Spring	Basin Outside Mammoth Cave National Park Boundary	Edmonson	CAH, PCR, SCR, OSRW	
Pond Run of Rough River	Landuse Change to Headwaters (1.4-6.8)	Breckinridge/Ohio	WAH, PCR, SCR, OSRW	
Rough River	Linders Creek to Vertrees Creek (138.0-149.4)	Hardin	WAH, PCR, SCR, OSRW	
Rough River	River Mile 89.6 to Rough River Lake Dam to 90.4	Ohio/ Grayson	CAH, WAH, PCR, SCR	
Rough River	River Mile 74.5 to River Mile 74.2 (Hwy 54 Bridge)	McLean/ Ohio	CAH, PCR, SCR	
Roundstone Creek of Nolin River	Hwy 1140 (River Mile 3.8) to Headwaters (River Mile 10.25)	Hart	CAH, PCR, SCR	
Running Spring	Basin Outside Mammoth Cave National Park Boundary	Edmonson	CAH, PCR, SCR, OSRW	
Russell Creek of Green River	Mouth to Columbia WWTP (0.0-40.0)	Green/ Adair	WAH, PCR, SCR, OSRW	
Russell Creek of Green River	Reynolds Creek to confluence with Hudson Creek and Mount Olive Creek (56.9 -66.3)	Adair, Russell	WAH, PCR, SCR, OSRW	
Sixes Creek of Indian Camp Creek	Wild Branch to Headwaters (2.0-7.5)	Ohio	WAH, PCR, SCR, OSRW	
Suds Spring	Basin Outside Mammoth Cave National Park Boundary	Hart/ Barren	CAH, PCR, SCR, OSRW	
Sulphur Branch of Alexander Creek	Mouth to Headwaters (0.0-3.0)	Edmonson	WAH, PCR, SCR, OSRW	
Thompson Branch	Webb Branch to Tennessee State Line (0.3-1.5)	Simpson	WAH, PCR, SCR, OSRW	
Trammel Fork of West Fork of Drakes Creek	River Mile 30.6 (Kentucky/Tennessee State Line) to Hwy 31E (River Mile 23.8)	Allen	CAH, PCR, SCR,	
Trammel Fork of West Fork of Drakes Creek	Mouth to Tennessee State Line (0.0-30.6)	Allen/ Warren	CAH, PCR, SCR, OSRW	
Turnhole Spring	Basin Outside Mammoth Cave National Park Boundary	Edmonson/ arren	CAH, PCR, SCR, OSRW	
Underground River System	Mammoth Cave National Park	Edmonson/ Hart/Barren	CAH, PCR, SCR, OSRW	
Unidentified Tributary of Green River	Landuse Change to Headwaters (1.7-3.2)	Adair	WAH, PCR, SCR, OSRW	
Unidentified Tributary of White Oak Creek	Hovious Rd Crossing to SR 76 (0.0-2.1)	Adair	WAH, PCR, SCR, OSRW	
West Fork of Pond River	Unidentified Tributary to East Branch of Pond River (12.45 -22.5)	Christian	WAH, PCR, SCR, OSRW	
<b>TRADEWATER RIVER BASIN</b>				
East Fork of Flynn Fork of Tradewater River	Landuse Change (US Hwy 62) to Headwaters (2.15-4.6)	Caldwell	WAH, PCR, SCR, OSRW	
Piney Creek of Tradewater River	Lake Beshear Backwaters to Headwaters (4.5-10.2)	Caldwell, Christian	WAH, PCR, SCR, OSRW	
Sandlick Creek of Tradewater River	Camp Creek to Headwaters (4.5-8.6)	Christian	WAH, PCR, SCR, OSRW	
Tradewater River	Dripping Springs Branch to Buntin Lake Dam (126.2-133.9)	Christian	WAH, PCR, SCR, OSRW	
Unidentified Tributary of Piney Creek of Tradewater River	Mouth to Headwaters (0.0-2.9)	Caldwell	WAH, PCR, SCR, OSRW	
Unidentified Tributary of Sandlick Creek of Tradewater River	Mouth to Headwaters (0.0-1.4)	Christian	WAH, PCR, SCR, OSRW	
<b>LOWER CUMBERLAND RIVER BASIN</b>				

Casey Creek	Mouth to headwaters (0.0-10.5)	Trigg	CAH, PCR, SCR	
Crooked Creek of Cumberland River	Energy Lake Backwaters to Headwaters (3.0-9.1)	Trigg	WAH, PCR, SCR, OSRW	
Donaldson Creek of Cumberland River	Barkley Lake Backwaters to Unnamed Tributary	Trigg	WAH, PCR, SCR, OSRW	
Elk Fork of Red River of Cumberland River	Tennessee State Line to Dry Branch (7.5-23.1)	Todd	WAH, PCR, SCR, OSRW	
Skinframe Creek	Livingston Creek to (0.0-7.8)	Lyon	CAH, PCR, SCR	
Sugar Creek of Cumberland River	Lick Creek to Unidentified Tributary (2.2-6.9)	Livingston	WAH, PCR, SCR, OSRW	
Sulphur Spring Creek	Red River to Headwaters (0.0-9.1)	Simpson	CAH, PCR, SCR	
West Fork of Red River	State Line to River Mile 29.0 (14.5-32.2)	Christian	CAH, PCR, SCR, OSRW	
Whipporwill Creek	Red River to Headwaters (0.0-45.4)	Logan/Todd	WAH, PCR, SCR, OSRW	
UPPER CUMBERLAND RIVER BASIN				
Acorn Fork of Stinking Creek	Basin above River Mile 1.0 (1.0-3.3)	Knox	WAH, PCR, SCR, OSRW	
Adams Branch of Pigeon Roost Creek	Basin	Whitley	WAH, PCR, SCR, OSRW	
Archers Creek of Cumberland River	Basin (above RM 0.05 mi backwater at mouth)	Whitley	WAH, PCR, SCR, OSRW	
Bad Branch of Poor Fork of Cumberland River	Basin	Letcher	CAH, PCR, SCR, OSRW	
Bark Camp Creek of Cumberland River	Basin (above RM 0.1 backwater at mouth)	Whitley	CAH, PCR, SCR, OSRW	
Barren Fork of Indian Creek	Basin	McCreary	PCR, SCR, OSRW	
Beaver Creek of Cumberland River	Basin	McCreary	CAH, PCR, SCR, OSRW	
Bee Lick Creek of Brushy Creek of Buck Creek	Mouth to Warren Branch (0.0-5.7)	Pulaski	WAH, PCR, SCR, OSRW	
Bens Fork of Little Clear Creek	Basin	Bell	WAH, PCR, SCR, OSRW	
Big Branch of Marsh Creek	Basin above River Mile 0.8	McCreary	WAH, PCR, SCR, OSRW	
Big Lick Branch of Cumberland River	Basin (above 1.1, Cumberland River backwaters)	Pulaski	WAH, PCR, SCR, OSRW	
Blacksnake Branch of Brownies Creek	Basin	Bell	WAH, PCR, SCR, OSRW	
Breedens Creek of Clover Fork of Cumberland River	Basin	Harlan	WAH, PCR, SCR, OSRW	
Brices Creek of Road Fork of Stinking Creek	Basin	Knox	WAH, PCR, SCR, OSRW	
Brownies Creek of Cumberland River	Basin above Blacksnake Branch (RM 10.3)	Harlan	WAH, PCR, SCR, OSRW	
Brush Creek of Roundstone Creek	Wolf Creek to Reemergence of Sinking Creek (1.1-7.6)	Rockcastle	WAH, PCR, SCR, OSRW	
Brushy Creek of Buck Creek	Mouth to Headwaters (0.0-16.5)	Pulaski	WAH, PCR, SCR, OSRW	
Buck Creek of Cumberland River	River Mile 11.7 (Backwaters of Lake Cumberland) to RM 55.0 (0.8 RM upstream of confluence of Hurricane Creek)	Pulaski	WAH, PCR, SCR, OSRW	
Buck Creek of Clear Fork of Cumberland River	Basin	Whitley	WAH, PCR, SCR, OSRW	
Bucks Branch of Jellico Creek	Basin	Whitley	WAH, PCR, SCR, OSRW	
Buffalo Creek of Laurel Fork of Clear Fork of Cumberland River	Basin above Kentucky/ Tennessee State Line	Whitley	WAH, PCR, SCR, OSRW	
Bunches Creek of Cumberland River	Basin	Whitley	CAH, PCR, SCR, OSRW	
Campbell Branch of Jellico Creek	Basin	Whitley	WAH, PCR, SCR, OSRW	
Cane Creek of Rockcastle River	Mouth to Dam (0.0-11.85)	Laurel	WAH, PCR, SCR, OSRW	
Caney Creek of Left Fork of Straight Creek	Basin	Bell	WAH, PCR, SCR, OSRW	
Cannon Creek of Yellow Creek	Basin above Cannon Creek Lake (RM 5.1)	Bell	WAH, PCR, SCR, OSRW	

Clifty Creek of Brushy Creek of Buck Creek	Mouth to Rocky Branch (0.0-2.7)	Pulaski	WAH, PCR, SCR, OSRW
Clover Bottom Creek	Horse Lick Creek to River Mile 1.4	Jackson	CAH, PCR, SCR
Cogur Fork of Indian Creek	Basin	McCreary	CAH, PCR, SCR, OSRW
Coles Branch of Road Fork of Stinking Creek	Basin	Knox	WAH, PCR, SCR, OSRW
Colliers Creek of Poor Fork of Cumberland River	Basin	Bell	WAH, PCR, SCR, OSRW
Criscillis Branch of Jellico Creek	Basin	Whitley	WAH, PCR, SCR, OSRW
Cumberland River	River Mile 549.65 (Backwaters Lake Cumberland) to River Mile 566.1 (0.2 mile below Summer Shoals)	McCreary/ Whitley	WAH, PCR, SCR, OSRW
Cumberland River	Kentucky/Tennessee state line (River Mile 379.8) to River Mile 456.7 (Lake Cumberland Dam)	Clinton, Cumberland, Russell, Monroe	CAH, PCR, SCR
Davis Branch of Little Yellow Creek	Basin	Bell	WAH, PCR, SCR, OSRW
Dog Slaughter Creek of Cumberland River	Basin	Whitley	CAH, PCR, SCR, OSRW
Dolen Branch of Rock Creek	Basin	McCreary	WAH, PCR, SCR, OSRW
Eagle Creek of Cumberland River	Basin	McCreary	WAH, PCR, SCR, OSRW
FishTrap Branch	Basin above River Mile 0.5 (Lake Cumberland backwaters)	McCreary	WAH, PCR, SCR, OSRW
Four Mile Creek of Cumberland River	Basin above River Mile 2.5	Bell	WAH, PCR, SCR, OSRW
Four Mile Run of Yellow Creek Bypass	Basin above River Mile 1.0	Bell	WAH, PCR, SCR, OSRW
Fugitt Creek of Clover Fork of Cumberland River	Basin	Harlan	CAH, PCR, SCR, OSRW
Hale Fork of Road Fork of Stinking Creek	Basin	Knox	WAH, PCR, SCR, OSRW
Hawk Creek of Rockcastle River	Basin	Laurel	CAH, PCR, SCR
Hinkle Branch of Road Fork of Stinking Creek	Basin	Knox	WAH, PCR, SCR, OSRW
Honeycutt Branch of Turkey Creek of Stinking Creek	Basin	Knox	WAH, PCR, SCR, OSRW
Horse Lick Creek	Mouth (0.0) at Middle Fork of Rockcastle River to River Mile 12.3 (Clover Bottom Creek)	Jackson/ Rockcastle	WAH, PCR, SCR, OSRW
Howards Creek of Illwill Creek of Wolf River	Dale Hollow Reservoir Backwaters to Headwaters	Clinton	WAH, PCR, SCR, OSRW
Hunting Shirt Branch of Richland Creek	Basin	Knox	WAH, PCR, SCR, OSRW
Indian Creek of Cumberland River	Kilburn Fork to Barren Fork (2.4-6.8)	McCreary	WAH, PCR, SCR, OSRW
Indian Creek of Cumberland River	Basin above and including Barren Fork	McCreary	CAH, PCR, SCR, OSRW
Jackie Branch of Bark Camp Creek	Mouth to Headwaters (0.0-1.65)	Whitley	CAH, PCR, SCR, OSRW
Jellico Creek of Cumberland River	River Mile 22.5 (confluence with Capuchin Creek) to River Mile 25.3 (Kentucky/Tennessee State Line)	McCreary	WAH, PCR, SCR, OSRW
Jennys Branch of Laurel Fork of Marsh Creek	Basin	McCreary	WAH, PCR, SCR, OSRW
Kelly Branch of Clover Fork of Cumberland River	Basin	Harlan	WAH, PCR, SCR, OSRW
Kennedy Creek of Little South Fork of Cumberland River	Little South Fork of Cumberland River to River Mile 1.0	Wayne	WAH, PCR, SCR, OSRW

Kilburn Fork of Indian Creek	Basin	McCreary	WAH, PCR, SCR, OSRW	
Laurel Creek of Marsh Creek	River Mile 3.1 (Jennys Branch) to River Mile 9.0 (Dam)	McCreary	CAH, PCR, SCR, OSRW	
Laurel Fork of Clear Fork of Cumberland River	Basin above River Mile 16.0 (John Partin Road off Hwy 190)	Bell	WAH, PCR, SCR, OSRW	
Laurel Fork of Clear Fork of Cumberland River	River Mile 4.25 (Kentucky/Tennessee state line) to River Mile 16.0 (John Partin Road off Hwy 90)	Whitley	WAH, PCR, SCR, OSRW	
Laurel Fork of Kilburn Fork	Basin	McCreary	WAH, PCR, SCR, OSRW	
Laurel Fork of Middle Fork Rockcastle River	Middle Fork of Rockcastle River to Headwaters (0.0-12.3)	Jackson	WAH, PCR, SCR, OSRW	
Laurel River	River Mile 0.9 to Laurel River Lake Dam (0.9-2.4)	Laurel, Whitley	CAH, PCR, SCR	
Lick Fork of Yellow Creek By-Pass of Yellow Creek	Basin	Bell	WAH, PCR, SCR, OSRW	
Little Popular Creek of Cumberland River	Basin above Hubbs Creek (4.4)	Knox	WAH, PCR, SCR, OSRW	
Little South Fork of Cumberland River	River Mile 4.4 (backwaters of Lake Cumberland) to River Mile 35.5 (Confluence with Langham Branch)	Wayne, McCreary	WAH, PCR, SCR, OSRW	
Long Branch of Left Fork of Straight Creek	Basin	Bell	WAH, PCR, SCR, OSRW	
Looney Creek of Poor Fork of Cumberland River	Basin above River Mile 5.9 (Lynch City Limits)	Harlan	CAH, PCR, SCR	
Marsh Creek	Basin above River Mile 24.6 (Confluence with Murphy Creek) to River Mile 26.5 (within Kentucky)	McCreary	WAH, PCR, SCR, OSRW	
Marsh Creek	River Mile 0.05 (confluence with Cumberland River) to River Mile 24.6 (confluence with Murphy Creek)	McCreary	WAH, PCR, SCR, OSRW	
Martins Fork	Basin above River Mile 32.7 (Cumberland Gap National Historical Park Boundary)	Bell	CAH, PCR, SCR	
Martins Fork	River Mile 27.2 to River Mile 32.7 (Cumberland Gap National Historical Park Boundary)	Bell, Harlan	CAH, PCR, SCR, OSRW	
McFarland Creek of Cumberland River	Little McFarland Creek to Spring Branch (0.8-6.2)	Monroe	WAH, PCR, SCR, OSRW	
Meadow Fork of Franks Creek	Basin	Letcher	WAH, PCR, SCR, OSRW	
Meshack Creek of Cumberland River	Mouth to Pitcock Branch (0.0-2.8)	Monroe	WAH, PCR, SCR, OSRW	
Middle Fork of Rockcastle River	Confluence of Middle and South Forks of Rockcastle River (River Mile 0.0) to River Mile 7.9 (confluence of Indian Creek and Laurel Fork)	Jackson	WAH, PCR, SCR, OSRW	
Mill Branch of Stinking Creek	Basin above reservoir backwaters (0.8)	Knox	WAH, PCR, SCR, OSRW	
Mill Creek of Straight Creek	Basin	Bell	WAH, PCR, SCR, OSRW	
Mill Creek of Cumberland River	Basin	McCreary	WAH, PCR, SCR, OSRW	
Moore Creek of Stinking Creek	Basin	Knox	WAH, PCR, SCR, OSRW	
Mud Creek of Clear Fork of Cumberland River	Basin above River Mile 6.5 (0.3 river miles above Siler Cemetery Road Bridge)	Whitley	WAH, PCR, SCR, OSRW	
Mud Camp Creek of Cumberland River	Mouth to Collins Branch (0.0-1.2)	Cumberland	WAH, PCR, SCR, OSRW	
Mud Camp Creek of Cumberland River	Unidentified Tributary to Headwaters (3.8-8.8)	Cumberland/Monroe	WAH, PCR, SCR, OSRW	
Mud Lick of Stinking Creek	Basin	Knox	WAH, PCR, SCR, OSRW	
Ned Branch of Rockcastle River	Basin above backwaters (RM 0.45)	Laurel	WAH, PCR, SCR, OSRW	



Otter Creek of Cumberland River	Lake Cumberland Backwaters to Carpenter Fork (14.0-22.1)	Wayne	WAH, PCR, SCR, OSRW
Patterson Creek of Cumberland River	Basin above River Mile 7.3 (confluence with Rose Creek)	Whitley	WAH, PCR, SCR, OSRW
Poor Fork of Cumberland River	Franks Creek to Headwaters (48.7-52.4)	Letcher	WAH, PCR, SCR, OSRW
Poor Fork of Cumberland River	Basin above River Mile 48.1 (at Joseph Road off of Hwy 932)	Letcher	CAH, PCR, SCR, OSRW
Presley House Branch of Poor Fork of Cumberland River	Mouth to Headwaters (0.0-1.5)	Letcher	WAH, PCR, SCR, OSRW
Puncheoncamp Branch of Rock Creek of South Fork of Cumberland River	Mouth to Headwaters (0.0-1.85)	McCreary	WAH, PCR, SCR, OSRW
Richland Creek of Cumberland River	Basin above River Mile 15.8 (0.5 stream miles above Hubbard Branch) to River Mile 21.4	Knox	WAH, PCR, SCR, OSRW
Roaring Fork of Stinking Creek	Basin	Knox	WAH, PCR, SCR, OSRW
Rock Creek of South Fork of Cumberland River	Kentucky/Tennessee State Line (River Mile 21.5) to White Oak Creek	McCreary	CAH, PCR, SCR, OSRW
Rock Creek of Jellico Creek	Basin	McCreary	WAH, PCR, SCR, OSRW
Rockcastle River	River Mile 8.95 (backwaters of Lake Cumberland) to River Mile 54.7 (confluence of Middle Fork and South Fork Rockcastle River)	Laurel/ Pulaski	WAH, PCR, SCR, OSRW
Ross Branch of Jellico Creek	Basin	Whitley	WAH, PCR, SCR, OSRW
Roundstone Creek of Rockcastle River	River Mile 13.5 (confluence of Renfro Creek) to River Mile 26.4 (Interstate I-75)	Rockcastle	WAH, PCR, SCR, OSRW
Ryans Creek of Jellico Creek	Basin	Whitley	WAH, PCR, SCR, OSRW
Sanders Creek of Cumberland River	Basin	Whitley	WAH, PCR, SCR, OSRW
Shillalah Creek of Clear Fork of Yellow Creek	Cumberland Gap National Historical Park Boundary to Headwaters (1.5-5.5)	Bell	CAH, PCR, SCR, OSRW
Shillalah Creek of Clear Fork of Yellow Creek	Mouth to Cumberland Gap National Historical Park Boundary to Mouth (0.0-1.5)	Bell	WAH, PCR, SCR, OSRW
Shut-in Branch of Jellico Creek	Basin	McCreary	WAH, PCR, SCR, OSRW
Sinking Creek	Headwaters to Rockcastle River (0.0-20.3)	Laurel	WAH, PCR, SCR, OSRW
Sims Fork of Left Fork of Straight Creek	Basin	Bell	WAH, PCR, SCR, OSRW
Smith Creek of Franks Creek	Basin	Letcher	WAH, PCR, SCR, OSRW
South Fork of Cumberland River	River Mile 44.3 (Blue Heron) to River Mile 54.8 (Kentucky /Tennessee State Line)	McCreary	WAH, PCR, SCR, OSRW
South Fork of Rockcastle River	River Mile 2.1 to White Oak Creek (River Mile 5.8)	Laurel	WAH, PCR, SCR, OSRW
South Fork of Rockcastle River	Rockcastle River (River Mile 0.0) to River Mile 2.1	Rockcastle	WAH, PCR, SCR, OSRW
Stevenson Branch of Bennetts Fork of Yellow Creek	Basin	Bell	WAH, PCR, SCR, OSRW
Sulphur Creek of Wolf River of Obey River	Dale Hollow Reservoir Backwaters to Headwaters (1.7-5.1)	Clinton	WAH, PCR, SCR, OSRW
Trace Branch of Stinking Creek	Basin	Knox	WAH, PCR, SCR, OSRW
Trammel Fork of Marsh Creek	Basin	McCreary	WAH, PCR, SCR, OSRW
Turkey Creek of Stinking Creek	Basin	Knox	WAH, PCR, SCR, OSRW



Tyes Fork of Bennetts Fork of Patterson Creek	Basin	Whitley	WAH, PCR, SCR, OSRW	
Unidentified Tributary (across from Hemlock Grove) of Rock Creek of South Fork of Cumberland River	Mouth to Headwaters (0.0-1.2)	McCreary	WAH, PCR, SCR, OSRW	
Unidentified Tributary (RMI 17.0 of Rock Creek) of Rock Creek of South Fork of Cumberland River	Mouth to Headwaters (0.0-1.3)	McCreary	WAH, PCR, SCR, OSRW	
Watts Branch of Rock Creek	Basin	McCreary	WAH, PCR, SCR, OSRW	
Watts Creek of Cumberland River	Basin above Camp Blanton Lake (2.4)	Harlan	WAH, PCR, SCR, OSRW	
White Oak Creek of Rock Creek	Basin	McCreary	WAH, PCR, SCR, OSRW	
White Oak Creek of Sinking Creek	Basin above River Mile 0.9 (includes Little White Oak Creek)	Laurel	CAH, PCR, SCR	
Wood Creek of Little Rockcastle River	Confluence with Hazel Patch Creek (0.0) to River Mile 1.9 (Wood Creek Lake Dam)	Laurel	CAH, PCR, SCR	
Youngs Creek of Cumberland River	Basin	Whitley	WAH, PCR, SCR, OSRW	
<b>LAKES AND RESERVOIRS</b>				
Beulah (=Tyner)	Entire Reservoir	Jackson	WAH, CAH, PCR, SCR	
Cannon Creek	Entire Reservoir	Bell	WAH, CAH, PCR, SCR	
Laurel River	Entire Reservoir	Laurel/ Whitley	WAH, CAH, PCR, SCR	
Wood Creek	Entire Reservoir	Laurel	WAH, CAH, PCR, SCR	
<b>TENNESSEE RIVER BASIN</b>				
Blood River of Kentucky Lake (Tennessee River)	McCullough Fork to Tennessee State Line (15.15-18.7)	Calloway	WAH, PCR, SCR, OSRW	
Clarks River of Tennessee River	Persimmon Slough to Middle Fork Creek (28.7-30.7)	Marshall	WAH, PCR, SCR, OSRW	
Grindstone Creek of Kentucky Lake (Blood River of Tennessee River)	Kentucky Lake Backwaters to Headwaters (0.7-2.9)	Calloway	WAH, PCR, SCR, OSRW	
Panther Creek of Kentucky Lake (Blood River of Tennessee River)	Kentucky Lake Backwaters to Headwaters (0.5-5.7)	Calloway	WAH, PCR, SCR, OSRW	
Soldier Creek of West Fork of Clarks River	Mouth to South Fork of Soldier Creek (0.0-5.7)	Marshall	WAH, PCR, SCR, OSRW	
Sugar Creek of Kentucky Lake (Tennessee River)	Kentucky Lake Backwaters to Buzzard Roost Road (2.5-3.2)	Calloway	WAH, PCR, SCR, OSRW	
Sugar Creek of West Fork Clarks River	Mouth to Unnamed Reservoir (0.0-3.9)	Graves	WAH, PCR, SCR, OSRW	
Tennessee River	River Mile 23.1 (Kentucky Lake Dam) to River Mile 12.4 (12.4-23.1)	Livingston/ McCracken/ Marshall	WAH, PCR, SCR, OSRW	
Trace Creek of West Fork of Clarks River	Mouth to Neeley Branch (0.0-3.35)	Graves	WAH, PCR, SCR, OSRW	
Unidentified Tributary of Unidentified Tributary of Panther Creek of West Fork of Clarks River	Mouth to Headwaters (0.0-1.7)	Graves	WAH, PCR, SCR, OSRW	
West Fork of Clarks River	Soldier Creek to Duncan Creek (20.1-23.5)	Graves	WAH, PCR, SCR, OSRW	
Wildcat Creek of Kentucky Lake (Blood River of Tennessee River)	Ralph Wright Road Crossing to Headwaters 2.8-6.8)	Calloway	WAH, PCR, SCR, OSRW	
<b>OHIO RIVER BASIN (Main Stem and Minor Tributaries)</b>				
Crooked Creek	Rush Creek to City Lake Dam (18.1-26.4)	Crittenden	WAH, PCR, SCR, OSRW	
Doe Run Creek	Hwy 1638 to Headwaters (5.4-8.4)	Meade	CAH, PCR, SCR	
Double Lick Creek of	Mouth to Headwaters (0.0-3.5)	Boone	WAH, PCR, SCR,	

Woolper Creek			OSRW	
Garrison Creek	Mouth to Headwaters (0.0-4.85)	Boone	WAH, PCR, SCR, OSRW	
Kinniconick Creek	McDowell Creek to Headwaters (5.2)-50.9)	Lewis	WAH, PCR, SCR, OSRW	
Little South Fork of Big South Fork	Land Use Change to Headwaters (1.2-5.9)	Boone	WAH, PCR, SCR, OSRW	
Middle Fork of Massac Creek	Hines Road to Headwaters (3.1-6.4)	McCracken	WAH, PCR, SCR, OSRW	
Ohio River	River Mile 848.0 to River Mile 850.0	Union	WAH, PCR, SCR, OSRW	
Ohio River	River Mile 859.0 to River Mile 861.0	Union	WAH, PCR, SCR, OSRW	
Ohio River	River Mile 865.0 to River Mile 867.0	Union	WAH, PCR, SCR, OSRW	
Ohio River	River Mile 923.5 to River Mile 926.0	Livingston	WAH, PCR, SCR, OSRW	
Ohio River	River Mile 927.0 to River Mile 930.0	Livingston	WAH, PCR, SCR, OSRW	
Ohio River	River Mile 940.7 to River Mile 943.3	McCracken	WAH, PCR, SCR, OSRW	
Ohio River	River Mile 948.2 to River Mile 949.5	McCracken	WAH, PCR, SCR, OSRW	
Ohio River	River Mile 960.0 to River Mile 962.7 (above Lock and Dam 53)	Ballard	WAH, PCR, SCR, OSRW	
Ohio River	River Mile 966.3 to River Mile 969.5	Ballard	WAH, PCR, SCR, OSRW	
Ohio River	River Mile 922.0 to River Mile 923.5 (Channel East of Towhead Island)	Livingston	WAH, PCR, SCR, OSRW	
Otter Creek	Ohio River to River Mile 9.7	Meade	CAH, PCR, SCR	
Second Creek	Ohio River Backwaters to Headwaters (0.4-2.9)	Boone	WAH, PCR, SCR, OSRW	
Sinking Creek	Hwy 259 to Headwaters (includes Blue & Stony Forks)	Breckinridge	CAH, PCR, SCR	
Unidentified Tributary of Big Sugar Creek	I-71 to Headwaters (1.0-1.8)	Gallatin	WAH, PCR, SCR, OSRW	
Unidentified Tributary of Corn Creek	Mouth to Headwaters (0.0-2.3)	Trimble	WAH, PCR, SCR, OSRW	
Unidentified Tributary of Massac Creek	Mouth to Headwaters (0.0-1.7)	McCracken	WAH, PCR, SCR, OSRW	
West Fork of Massac Creek	SR 725 to Little Massac Creek (1.0-6.2)	McCracken	WAH, PCR, SCR, OSRW	
White Oak Creek	Mouth (Ohio River) to River Mile 1.08	Greenup	SCR	401 KAR 10:031, Section 2(1)(d) and 2(2) do not apply.
Yellowbank Creek	Ohio River Backwaters to Headwaters (2.0-12.0)	Breckinridge	WAH, PCR, SCR, OSRW	
<b>LAKES AND RESERVOIRS</b>				
Metropolis	Entire Lake	McCracken	WAH, PCR, SCR, OSRW	
MISSISSIPPI RIVER BASIN (Main Stem and Minor Tributaries)				
Bayou de Chien	River Mile 15.4 to Headwaters (River Mile 32.9)	Hickman/ Graves	WAH, PCR, SCR, OSRW	
Cane Creek of Bayou de Chien	Basin	Graves	WAH, PCR, SCR, OSRW	
Jackson Creek of Bayou de Chien	Basin	Graves	WAH, PCR, SCR, OSRW	
Jackson Creek	Mouth to Headwaters	Graves	WAH, PCR, SCR, OSRW	
Mississippi River	River Mile 935.0 to River Mile 930.0	Carlisle	WAH, PCR, SCR, OSRW	
Mississippi River	River Mile 947.0 to River Mile 945.0	Carlisle	WAH, PCR, SCR, OSRW	
Obion Creek	Hurricane Creek to Little Creek (26.7-37.1)	Hickman	WAH, PCR, SCR, OSRW	
Sand Creek of Bayou de Chien	Basin	Graves	WAH, PCR, SCR, OSRW	
South Fork of Bayou de Chien	Basin	Graves	WAH, PCR, SCR, OSRW	

Terrapin Creek	Tennessee State Line to Headwaters (2.7-6.0)	Graves	WAH, PCR, SCR, OSRW	
<b>LAKES AND RESERVOIRS</b>				
Murphy's Pond	Entire Pond and Preserve Area	Hickman	WAH, PCR, SCR, OSRW	
Swan Pond	Entire Lake	Ballard	WAH, PCR, SCR, OSRW	

[Exceptions to specific criteria in 401 KAR 10:031][5:031] [that apply to particular surface waters are shown in Table C][the tables of surface water use designations][in this section. All other criteria in 401 KAR 10:031][5:031][applicable to the listed use designations shall apply to these surface waters

Table C: SURFACE WATER USE DESIGNATIONS				
Stream	Zone	County	Use Designation	Exceptions to Specific Criteria
<b>BIG SANDY RIVER BASIN</b>				
Hobbs Fork of Pigeonroost Fork of Wolf Creek	Mouth to Headwaters	Martin	WAH, PCR, SCR, OSRW	-
Lower Pigeon Branch of Elkhorn Creek	Left Fork to Headwaters	Pike	WAH, PCR, SCR, OSRW	-
Paint Creek of Levisa Fork	River Mile 8.3 (Paintsville Lake Dam) to Levisa Fork	Johnson	CAH, PCR, SCR	-
Paintsville	Entire reservoir	Johnson	WAH, CAH, PCR, SCR	-
Russell Fork of Levisa Fork of Big Sandy River	Clinch Field RR Yard off HWY 80 to Virginia State Line	Pike	WAH, PCR, SCR, OSRW	-
Toms Branch of Elkhorn Creek	Mouth to Headwaters	Pike	WAH, PCR, SCR, OSRW	-
Unidentified Tributary of Hobbs Fork	Hobbs Fork of Pigeonroost Fork to Headwaters	Martin	WAH, PCR, SCR, OSRW	-
<b>LITTLE SANDY RIVER BASIN</b>				
Arabs Fork of Big Sinking Creek	Clay Fork to Headwaters	Elliott	WAH, PCR, SCR, OSRW	-
Big Caney Creek	Source to Grayson Lake	Elliott/Rowan	CAH, PCR, SCR, OSRW	-
Big Sinking Creek of Little Sandy River	SR 986 to Clay Fork and Arab Fork	Carter/Elliott	WAH, PCR, SCR, OSRW	-
Laurel Creek of Little Sandy River	Carter School Rd Bridge to Little Sandy River	Elliott/Rowan	CAH, PCR, SCR,	-
Laurel Creek of Little Sandy River	Carter School Rd Bridge to Headwaters	Elliott/Rowan	CAH, PCR, SCR, OSRW	-
Meadow Branch of Little Fork of Little Sandy River	Mouth to Headwaters	Elliott	WAH, PCR, SCR, OSRW	-
Middle Fork of Little Sandy River	Mouth to Sheepskin Branch	Elliott	WAH, PCR, SCR, OSRW	-
Nichols Fork of Little Fork of Little Sandy River	Green Branch to Headwaters	Elliott	WAH, PCR, SCR, OSRW	-
<b>LAKES AND RESERVOIRS</b>				
Greenbo	Entire Reservoir	Greenup	WAH, CAH, PCR, SCR	-
<b>LICKING RIVER BASIN</b>				
Blackwater Creek of Licking	Eaton Creek to Greasy Fork	Morgan	WAH, PCR, SCR,	-

River			OSRW	
Blanket Creek of Licking River	Mouth to Unidentified Tributary	Pendleton	<del>WAH, PCR, SCR,</del> OSRW	-
Botts Fork of Brushy Fork of Licking River	Mouth to Landuse Change	Menifee	<del>WAH, PCR, SCR,</del> OSRW	-
Bowman Creek	Mouth to Unidentified Tributary	Kenton	<del>WAH, PCR, SCR,</del> OSRW	-
Brushy Fork of Meyers Creek	Cave Run Lake Backwaters to Headwaters	Menifee	<del>WAH, PCR, SCR,</del> OSRW	-
Brushy Fork of South Fork of Grassy Creek	Mouth to Headwaters	Pendleton	<del>WAH, PCR, SCR,</del> OSRW	-
Bucket Branch of North Fork of Licking River	Mouth to Headwaters	Morgan	<del>WAH, PCR, SCR,</del> OSRW	-
Cedar Creek of Licking River	Mouth to North Branch of Cedar Creek	Robertson	<del>WAH, PCR, SCR,</del> OSRW	-
Crane Creek	Source to North Fork of Licking River	Rowan/ Morgan	<del>GAH, PCR, SCR,</del> OSRW	-
Devils Fork of North Fork of Licking River	Mouth to Headwaters	Elliott/ Morgan	<del>WAH, PCR, SCR,</del> OSRW	-
Flour Creek of Licking River	Mouth to Unidentified Tributary	Pendleton	<del>WAH, PCR, SCR,</del> OSRW	-
Grovers Creek of Kincaid Creek	Kincaid Lake Backwaters to Unidentified Tributary	Bracken/ Pendleton	<del>WAH, PCR, SCR,</del> OSRW	-
Licking River	River Mile 180.8 (Cave Run Lake Dam) to River Mile 175.6 (U.S. Highway 60 Bridge)	Bath/ Rowan	<del>GAH, PCR, SCR</del>	-
Licking River	River Mile 170.6 (Unnamed Road off Slatey Point Road) to River Mile 159.4 (Hwy 211)	Bath/ Rowan/ Fleming	<del>WAH, PCR, SCR,</del> OSRW	-
Licking River	River Mile 117.6 (1.3 river miles above Fishtrap Creek) to River Mile 10.3 (Hwy 536 Bridge)	Kenton/ Campbell/ Pendleton/ Harrison/ Robertson/ Fleming	<del>WAH, PCR, SCR,</del> OSRW	-
Minor Creek of Crane Creek	Basin	Morgan/ Rowan	<del>GAH, PCR, SCR</del>	-
North Fork of Licking River	Cave Run Lake Backwaters to Devils Fork	Morgan	<del>WAH, PCR, SCR,</del> OSRW	-
Sawyers Fork of Cruises Creek	Mouth to Headwaters	Kenton	<del>WAH, PCR, SCR,</del> OSRW	-
Slabcamp Creek of Crane Creek of Licking River	Mouth to Headwaters	Rowan	<del>GAH, PCR, SCR,</del> OSRW	-
Slate Creek of Licking River	Mouth to Mill Creek	Bath	<del>WAH, PCR, SCR,</del> OSRW	-
South Fork Grassy Creek of Grassy Creek of Licking River	Mouth to Grassy Creek	Kenton/ Pendleton	<del>WAH, PCR, SCR,</del> OSRW	-
Unidentified Tributary of	Mouth to Headwaters	Mason	<del>WAH, PCR, SCR,</del>	-

<del>Shannon Creek of North Fork of Licking River</del>			<del>OSRW</del>	
<del>Welch Fork of Brushy Fork of Licking River</del>	<del>Mouth to First Road Crossing</del>	<del>Menifee</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>West Creek of Licking River</del>	<del>Mouth to Headwaters</del>	<del>Harrison/Robertson</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
KENTUCKY RIVER BASIN				
<del>Backbone Creek of Sixmile Creek of Kentucky River</del>	<del>Mouth to Scabble Creek</del>	<del>Franklin/Henry/Shelby</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Bear Branch of North Fork of Kentucky River</del>	<del>Above Sediment Pond to Headwaters</del>	<del>Perry</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Big Double Creek of Red Bird River</del>	<del>Mouth to Headwaters</del>	<del>Clay</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Bill Branch of Laurel Fork of Greasy Creek</del>	<del>Mouth to Right Fork and Left Fork Creek</del>	<del>Leslie</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Billy Fork of Millers Creek</del>	<del>Land Use Change to Headwaters</del>	<del>Lee/Elliott</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Bill Oak Branch of Left Fork of Buffalo Creek</del>	<del>Mouth to Headwaters</del>	<del>Owsley</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Buffalo Creek of South Fork of Kentucky River</del>	<del>Mouth to Right Fork and Left Fork</del>	<del>Owsley</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Gavanaugh Creek</del>	<del>South Fork of Station Camp Creek to Foxtown Rd</del>	<del>Jackson</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Cherry Run of Boyd Run of North Elkhorn Creek</del>	<del>Mouth to Boyd Run</del>	<del>Scott</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Chester Creek of Middle Fork of Red River</del>	<del>Mouth to Headwaters</del>	<del>Wolfe</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Ghimney Top Creek of Red River</del>	<del>Basin</del>	<del>Wolfe</del>	<del>CAH, PCR, SCR</del>	<del>-</del>
<del>Clear Creek of Kentucky River</del>	<del>Mouth to East Fork Clear Creek</del>	<del>Woodford</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Glemens Fork of Buckhorn Creek</del>	<del>Mouth to Headwaters</del>	<del>Breathitt</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Goles Fork of Buckhorn Creek</del>	<del>Mouth to Headwaters</del>	<del>Breathitt</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Graig Creek of Kentucky River</del>	<del>Mouth to Unidentified Tributary</del>	<del>Woodford</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Deep Ford Branch of Cutshin Creek</del>	<del>Above Pond to Headwaters</del>	<del>Leslie</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Dix River</del>	<del>River Mile 3.1 (Herrington Lake Dam) to Kentucky River</del>	<del>Garrard/Mercer</del>	<del>CAH, PCR, SCR</del>	<del>-</del>
<del>Dog Fork of Swift Camp Creek</del>	<del>Basin</del>	<del>Wolfe</del>	<del>CAH, PCR, SCR</del>	<del>-</del>
<del>Drennon Creek of Kentucky River</del>	<del>Fivemile Creek to Town Branch</del>	<del>Henry</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>East Fork of Indian Creek of Indian Creek</del>	<del>West Fork of Indian Creek to Indian Creek</del>	<del>Menifee</del>	<del>CAH, PCR, SCR</del>	<del>-</del>
<del>East Fork of Indian Creek of Indian Creek of Red River River</del>	<del>West Fork of Indian Creek to Headwaters</del>	<del>Menifee</del>	<del>CAH, PCR, SCR, OSRW</del>	<del>-</del>

Elisha Creek of Red Bird River	Land Use Change (Residential) to the confluence of Right Fork and Middle Fork Elisha Creek	Leslie	WAH, PCR, SCR, OSRW	-
Emily Run of Drennon Creek	Mouth to Unidentified Tributary	Henry	WAH, PCR, SCR, OSRW	-
Evans Fork of Billey Fork of Millers Creek	Mouth to Headwaters	Estill	WAH, PCR, SCR, OSRW	-
Falling Rock Branch of Clemens Fork of Buckhorn Creek	Mouth to Headwaters	Breathitt	WAH, PCR, SCR, OSRW	-
Gilberts Creek of Kentucky River	Mouth to Unidentified Tributary	Anderson	WAH, PCR, SCR, OSRW	-
Gladie Creek of Red River	Basin	Menifee	GAH, PCR, SCR	-
Gladie Creek of Red River	Land Use Change to Long Branch	Menifee	GAH, PCR, SCR, OSRW	-
Goose Creek of South Fork of Kentucky River	Mouth to Laurel Creek	Clay/Leslie	WAH, PCR, SCR, OSRW	-
Griers Creek of Kentucky River	Kentucky River Backwaters to Unidentified Tributary	Woodford	WAH, PCR, SCR, OSRW	-
Grindstone Creek of Kentucky River	Kentucky River Backwaters to Headwaters	Franklin	WAH, PCR, SCR, OSRW	-
Hardwick Creek of Red River	Mouth to Little Hardwick Creek	Powell	WAH, PCR, SCR, OSRW	-
Hell For Certain of Middle Fork of Red River	Mouth to Big Fork	Leslie	WAH, PCR, SCR, OSRW	-
Hines Creek of Kentucky River	Kentucky River Backwaters to confluence with Unidentified Tributary	Madison	WAH, PCR, SCR, OSRW	-
Honey Branch of Greasy Creek of Middle Fork of Kentucky River	Mouth to Headwaters	Leslie	WAH, PCR, SCR, OSRW	-
Hopper Cave Branch of Gavanaugh Creek	Mouth to Headwaters	Jackson	WAH, PCR, SCR, OSRW	-
Indian Creek of Eagle Creek	Mouth to Headwaters	Garroll	WAH, PCR, SCR, OSRW	-
Indian Creek of Red River	River Mile 5.2 (0.3 river miles below Bear Branch) to River Mile 1.2 (East Fork of Indian Creek)	Menifee	GAH, PCR, SCR	-
Indian Fork of Sixmile Creek of Kentucky River	Mouth to Headwaters	Shelby	WAH, PCR, SCR, OSRW	-
John Carpenter Fork of Clemens Fork of Buckhorn Creek	Mouth to Headwaters	Breathitt	WAH, PCR, SCR, OSRW	-
Katies Creek of Red Bird River	Mouth to Headwaters	Clay	WAH, PCR, SCR, OSRW	-
Laurel Fork of Left Fork Buffalo Creek of Buffalo Creek	Cortland Fork to Big Branch	Owsley	WAH, PCR, SCR, OSRW	-
Left Fork of Big Double Creek of Kentucky River	Mouth to Headwaters	Clay	WAH, PCR, SCR, OSRW	-

<del>Line Fork of North Fork of Kentucky River</del>	<del>Defeated Creek to Headwaters</del>	<del>Letcher</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Little Middle Fork of Elisha Creek of Red Bird River</del>	<del>Mouth to Headwaters</del>	<del>Clay</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Little Millseat Branch of Clemons Fork of Buckhorn Creek</del>	<del>Mouth to Headwaters</del>	<del>Breathitt</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Little Sixmile Creek of Sixmile Creek of Kentucky River</del>	<del>Mouth to Headwaters</del>	<del>Henry</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Lower Howard Creek of Kentucky River</del>	<del>Mouth to West Fork</del>	<del>Clark</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Lulbegrud Creek of Red River</del>	<del>Mouth to Falls Branch</del>	<del>Clark/Powell</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Middle Fork of Kentucky River</del>	<del>Mouth to Upper Twin Creek</del>	<del>Lee/Owsley</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Middle Fork of Kentucky River</del>	<del>Hurts Creek to Greasy Creek</del>	<del>Leslie</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Middle Fork of Red River</del>	<del>Source to River Mile 10.7 (0.7 river miles below Sinking Fork)</del>	<del>Powell</del>	<del>GAH, PCR, SCR</del>	<del>-</del>
<del>Middle Fork of Red River</del>	<del>South Fork of Red River to Natural Bridge State Park Lake</del>	<del>Powell</del>	<del>GAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Mikes Branch of Laurel Fork of Left Fork of Buffalo Creek</del>	<del>Mouth to Headwaters</del>	<del>Owsley</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Mill Creek of Kentucky River</del>	<del>Upstream of Mouth to Headwaters</del>	<del>Owen</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Millseat Branch of Clemons Fork of Buckhorn Creek</del>	<del>Mouth to Headwaters</del>	<del>Breathitt</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Muddy Creek of Kentucky River</del>	<del>Elliston, Kentucky to Viney Creek</del>	<del>Madison</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Musselman Creek of Eagle Creek</del>	<del>Mouth to Headwaters</del>	<del>Grant</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Parched Corn Creek</del>	<del>Source to Red River</del>	<del>Wolfe</del>	<del>GAH, PCR, SCR</del>	<del>-</del>
<del>Red River</del>	<del>River Mile 70.4 (SR 746) to River Mile 50.3 (0.1 Miles below Auxier Branch)</del>	<del>Menifee/Wolfe</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Red Bird River of South Fork of Kentucky River</del>	<del>Mouth to Big Creek</del>	<del>Clay</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Right Fork of Buffalo Creek of Kentucky River</del>	<del>Mouth to Headwaters</del>	<del>Owsley</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Right Fork of Elisha Creek of Redbird River</del>	<del>Mouth to Headwaters</del>	<del>Leslie</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Rearing Fork of Lewis Fork of Buckhorn Creek</del>	<del>Mouth to Headwaters</del>	<del>Breathitt</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Reek Lick Creek</del>	<del>Mouth to Headwaters</del>	<del>Jackson</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Sand Ripple Creek of Kentucky River</del>	<del>Kentucky River Backwaters to Headwaters</del>	<del>Henry</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Severn Creek of Kentucky River</del>	<del>Kentucky River Backwaters to North Fork of Severn Creek</del>	<del>Owen</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>

<del>Shaker Creek of Kentucky River</del>	<del>Near Mouth to Shawnee Run</del>	<del>Mercer</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Shelly Rock Fork of Millseat Branch of Clemons Fork</del>	<del>Mouth to Headwaters</del>	<del>Breathitt</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Sixmile Creek of Kentucky River</del>	<del>Little Sixmile Creek to Dam</del>	<del>Henry</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>South Fork of Kentucky River</del>	<del>Mouth to Sexton Creek</del>	<del>Owsley</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>South Fork of Red River</del>	<del>Mouth to Sandlick Fork</del>	<del>Powell</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>South Fork of Station Camp Creek of Kentucky River</del>	<del>Mouth to Rock Lick Creek</del>	<del>Jackson</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Spruce Branch of Redbird River</del>	<del>Mouth to Headwaters</del>	<del>Clay</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Station Camp Creek of Kentucky River</del>	<del>Landuse Change to South Fork of Station Camp Creek</del>	<del>Estill</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Steeles Run of Elkhorn Creek</del>	<del>Mouth to Unidentified Tributary</del>	<del>Fayette</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Steer Fork of War Fork of Station Camp Creek</del>	<del>Mouth to Headwaters</del>	<del>Jackson</del>	<del>GAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Sturgeon Creek of Kentucky River</del>	<del>Duck Fork to Little Sturgeon Creek</del>	<del>Lee/Owsley</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Sugar Creek of Redbird River</del>	<del>Landuse Change to Headwaters</del>	<del>Leslie</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Swift Camp Creek</del>	<del>Source to Red River</del>	<del>Wolfe</del>	<del>GAH, PCR, SCR</del>	<del>-</del>
<del>Unidentified Tributary of Gawood Branch of Beech Fork</del>	<del>Mouth to Headwaters</del>	<del>Leslie</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Unidentified Tributary of Cedar Creek of Kentucky River</del>	<del>Mouth to Headwaters</del>	<del>Owen</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Unidentified Tributary of Glenns Creek of Kentucky River</del>	<del>Mouth to Headwaters</del>	<del>Woodford</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Unidentified Tributary of Jacks Creek of Kentucky River</del>	<del>Mouth to Headwaters</del>	<del>Madison</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Unidentified Tributary of Kentucky River</del>	<del>Land Use Change to Headwaters</del>	<del>Franklin</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Unidentified Tributary of Line Fork of North Fork of Kentucky River (LGW)</del>	<del>Mouth to Headwaters</del>	<del>Letcher</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Sulphur Creek of Elkhorn Creek</del>	<del>Mouth to Headwaters</del>	<del>Franklin</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>War Fork of Station Camp Creek</del>	<del>Mouth to Headwaters</del>	<del>Jackson</del>	<del>GAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>War Fork of Station Camp Creek</del>	<del>Basin above River Mile 1.9 (0.3 river miles below Wind Cave Branch)</del>	<del>Jackson</del>	<del>GAH, PCR, SCR</del>	<del>-</del>
<del>Watches Fork of Laurel Fork of Left Fork of Buffalo Creek</del>	<del>Mouth to Headwaters</del>	<del>Owsley</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>
<del>Wolfpen Creek of Red River</del>	<del>Mouth to Headwaters</del>	<del>Menifee</del>	<del>WAH, PCR, SCR, OSRW</del>	<del>-</del>



LAKES AND RESERVOIRS				
Bert Combs	Entire Reservoir	Clay	WAH, CAH, PCR, SCR	-
Fishpond	Entire Reservoir	Letcher	WAH, CAH, PCR, SCR	-
Mill Creek	Entire Reservoir	Wolfe	WAH, CAH, PCR, SCR	-
SALT RIVER BASIN				
Brashears Creek of Salt River	Guist Creek to Bulskin and Clear Creek	Shelby/ Spencer	WAH, PCR, SCR, OSRW	-
Cedar Creek of Salt River	Mouth to Greens Branch	Bullitt	WAH, PCR, SCR, OSRW	-
Chaplin River of Salt River	Thompson Creek to Cornishville, KY	Washington	WAH, PCR, SCR, OSRW	-
Doctors Fork of Chaplin River	Mouth to Begley Branch	Boyle	WAH, PCR, SCR, OSRW	-
Guist Creek of Brashears Creek	Mouth to Jephtha Creek	Spencer	WAH, PCR, SCR, OSRW	-
Harts Run of Wilson Creek of Rolling Fork of Salt River	Mouth to Headwaters	Bullitt	WAH, PCR, SCR, OSRW	-
Indian Creek of Thompson Creek of Chaplin River of Salt River	Mouth to Unidentified Tributary	Mercer	WAH, PCR, SCR, OSRW	-
Lick Creek of Long Lick Creek of Beech Fork of Salt River	Mouth to 0.1 miles below Dam	Washington	WAH, PCR, SCR, OSRW	-
Otter Creek of Rolling Fork of Salt River	River Mile 9.7 to Ohio River	Larue	CAH, PCR, SCR, -	-
Otter Creek of Rolling Fork of Salt River	Landuse Change to confluence of East Fork and Middle Fork Otter Creek	Larue	CAH, PCR, SCR, OSRW	-
Overalls Creek of Wilson Creek of Rolling Fork of Salt River	Mouth to Headwaters of Middle Fork of Overalls Creek	Bullitt	WAH, PCR, SCR, OSRW	-
Rolling Fork of Salt River	River Mile 62.5 (0.5 mi downstream of Otter Cr) to River Mile 53.6 (0.8 mi upstream of Stiles Rd Bridge)	Larue/Nelson	WAH, PCR, SCR, OSRW	-
Salt Lick Creek of Rolling Fork of Salt River	Mouth to Headwaters	Larue, Marion	WAH, PCR, SCR, OSRW	-
Sulphur Creek of Chaplin River	Mouth to confluence of Cheese Lick and Brush Creek	Anderson/ Mercer/ Washington	WAH, PCR, SCR, OSRW	-
Unidentified Tributary of Glens Creek of Chaplin River	Mouth to Headwaters	Washington	WAH, PCR, SCR, OSRW	-
West Fork of Otter Creek of Rolling Fork of Salt River	Mouth to Headwaters	Larue	WAH, PCR, SCR, OSRW	-
Wilson Creek of Rolling Fork of Salt River	Mouth to Headwaters	Bullitt/Nelson	WAH, PCR, SCR, OSRW	-
GREEN RIVER BASIN				
Barren River	River Mile 15.1 (Lock and Dam #1) to Green River	Butler/ Warren	WAH, PCR, SCR, OSRW	-

Beaverdam Creek	Source to Green River	Edmonson	<del>CAH, PCR, SCR,</del> OSRW	-
Cane Run of Nolin River	<del>Nolin River Lake Backwaters to</del> Headwaters	Hart	<del>WAH, PCR, SCR,</del> OSRW	-
Cane Fork of Peter Creek	Mouth to Headwaters	Barren	<del>WAH, PCR, SCR,</del> OSRW	-
Clifty Creek of Rough River	<del>Barton Run to Western Kentucky</del> Parkway	Grayson	<del>WAH, PCR, SCR,</del> OSRW	-
Clifty Creek of Wolf Lick Creek	Little Clifty Creek to Sulphur Lick	Todd	<del>WAH, PCR, SCR,</del> OSRW	-
Double Sink Spring	<del>Basin Outside Mammoth Cave ational</del> Park Boundary	Edmonson/ Barren	<del>CAH, PCR, SCR,</del> OSRW	-
East Fork of Little Barren River	Red Lick Creek to Flat Creek	Metcalf	<del>WAH, PCR, SCR,</del> OSRW	-
Echo River	<del>Basin Outside Mammoth Cave National</del> Park Boundary	Edmonson	<del>CAH, PCR, SCR,</del> OSRW	-
Ellis Fork of Damron Creek	Mouth to Headwaters	Adair/Russell	<del>WAH, PCR, SCR,</del> OSRW	-
Falling Timber Creek of Skaggs Creek	Landuse Change to Headwaters	Barren/ Metcalf	<del>WAH, PCR, SCR,</del> OSRW	-
Fiddlers Creek of North Fork of Rough River	Mouth to Headwaters	Breckinridge	<del>WAH, PCR, SCR,</del> OSRW	-
Forbes Creek of Buck Creek of East Fork of Pond River	Mouth to Unidentified Tributary	Christian	<del>WAH, PCR, SCR,</del> OSRW	-
Ganter Spring	<del>Basin Outside Mammoth Cave National</del> Park Boundary	Edmonson	<del>CAH, PCR, SCR,</del> OSRW	-
Gasper River of Barren River	Clear Fork to Wiggington Creek	Logan/Warren	<del>WAH, PCR, SCR,</del> OSRW	-
Goose Creek of Green River	Mouth to Little Goose Creek	Casey/Russell	<del>WAH, PCR, SCR,</del> OSRW	-
Green River	<del>River Mile 309.1 (Green River Lake</del> Dam) to River Mile 210.55 (eastern Mammoth Cave National Park Boundary)	Hart/Taylor/ Green	<del>WAH, PCR, SCR,</del> OSRW	-
Green River	<del>River Mile 210.55 (eastern Mammoth</del> Cave National Park Boundary) to River Mile 185.0 (western Mammoth Cave National Park Boundary)	Edmonson/ Hart	<del>WAH, PCR, SCR,</del> OSRW	-
Green River	<del>Downstream Mammoth Cave National</del> Park Boundary to Lynn Camp Creek	Edmonson/ Hart	<del>WAH, PCR, SCR,</del> OSRW	-
Green River	<del>River Mile 170.2 (Lock and Dam #5) to</del> River Mile 149.6 (1.0 river miles below Lock and Dam #4)	Butler/Warren	<del>WAH, PCR, SCR,</del> OSRW	-
Halls Creek of Rough River	Unidentified Tributary to Headwaters	Ohio	<del>WAH, PCR, SCR,</del> OSRW	-
Lick Creek of West Fork of Drakes Creek	Mouth to Headwaters	Simpson	<del>CAH, PCR, SCR,</del> OSRW	-
Linders Creek of Rough River	Mouth to Sutzer Creek	Hardin	<del>WAH, PCR, SCR,</del> OSRW	-

			OSRW	
Little Beaverdam Creek of Green River	Mouth to SR 743	Edmonson/ Warren	WAH, PCR, SCR, OSRW	-
Little Short Creek of Rough River	Mouth to Headwaters	Grayson	WAH, PCR, SCR, OSRW	-
Lynn Camp Creek	Source to Green River	Hart	GAH, PCR, SCR	-
Lynn Camp Creek of Green River	Mouth to Lindy Creek	Hart	GAH, PCR, SCR, OSRW	-
McFarland Creek of West Fork of Pond River	Grays Branch to Unidentified Tributary	Christian	WAH, PCR, SCR, OSRW	-
McCoy Spring	Basin Outside Mammoth Cave National Park Boundary	Hart	GAH, PCR, SCR, OSRW	-
Meeting Creek of Rough River	Little Meeting Creek to Petty Branch	Grayson/ Hardin	WAH, PCR, SCR, OSRW	-
Mile 205.7 Spring	Basin Outside Mammoth Cave National Park Boundary	Hart	GAH, PCR, SCR, OSRW	-
Muddy Creek of Caney Creek of Rough River	Landuse Change to Headwaters	Ohio	WAH, PCR, SCR, OSRW	-
Nolin River	River Mile 7.8 (Nolin Lake Dam) to Green River	Edmonson	GAH, WAH, PCR, SCR	-
North Fork of Rough River	Buffalo Creek to Reservoir Dam	Breckinridge	WAH, PCR, SCR, OSRW	-
Peter Creek of Barren River	Caney Fork to Dry Fork	Barren	WAH, PCR, SCR, OSRW	-
Pike Spring	Basin Outside Mammoth Cave National Park Boundary	Edmonson	GAH, PCR, SCR, OSRW	-
Pond Run of Rough River	Landuse Change to Headwaters	Breckinridge/Ohio	WAH, PCR, SCR, OSRW	-
Rough River	Linders Creek to Vertrees Creek	Hardin	WAH, PCR, SCR, OSRW	-
Rough River	River Mile 90.4 (Rough River Lake Dam) to River Mile 89.6	Ohio/Grayson	GAH, WAH, PCR, SCR	-
Rough River	River Mile 74.8 (Hwy 54 Bridge) to River Mile 74.2	McLean/Ohio	GAH, PCR, SCR	-
Roundstone Creek of Nolin River	Source to Hwy 1140 (River Mile 3.8	Hart	GAH, PCR, SCR	-
Running Spring	Basin Outside Mammoth Cave National Park Boundary	Edmonson	GAH, PCR, SCR, OSRW	-
Russell Creek of Green River	Mouth to Columbia WWTP	Green/Adair	WAH, PCR, SCR, OSRW	-
Russell Creek of Green River	Reynolds Creek to confluence with Hudson Creek and Mount Olive Creek	Adair, Russell	WAH, PCR, SCR, OSRW	-
Sixes Creek of Indian Camp Creek	Wild Branch to Headwaters	Ohio	WAH, PCR, SCR, OSRW	-
Suds Spring	Basin Outside Mammoth Cave National Park Boundary	Hart/Barren	GAH, PCR, SCR, OSRW	-
Sulphur Branch of Alexander Creek	Mouth to Headwaters	Edmonson	WAH, PCR, SCR, OSRW	-

Thompson Branch	Webb Branch to Tennessee State Line	Simpson	WAH, PCR, SCR, QSRW	-
Trammel Fork of West Fork of Drakes Creek	River Mile 30.6 (Kentucky/Tennessee State Line) to Hwy 31E (River Mile 23.8)	Allen	GAH, PCR, SCR, QSRW	-
Trammel Fork of West Fork of Drakes Creek	Mouth to Tennessee State Line	Allen/ Warren	GAH, PCR, SCR, QSRW	-
Turnhole Spring	Basin Outside Mammoth Cave National Park Boundary	Edmonson/ arren	GAH, PCR, SCR, QSRW	-
Underground River System	Mammoth Cave National Park	Edmonson/ Hart/Barren	GAH, PCR, SCR, QSRW	-
Unidentified Tributary of Green River	Landuse Change to Headwaters	Adair	WAH, PCR, SCR, QSRW	-
Unidentified Tributary of White Oak Creek	Hovious Rd Crossing to SR 76	Adair	WAH, PCR, SCR, QSRW	-
West Fork of Pond River	Unidentified Tributary to East Branch of Pond River	Christian	WAH, PCR, SCR, QSRW	-
TRADEWATER RIVER BASIN				
East Fork of Flynn Fork of Tradewater River	Landuse Change to Headwaters	Galdwell	WAH, PCR, SCR, QSRW	-
Piney Creek of Tradewater River	Lake Beshear Backwaters to Headwaters	Galdwell, Christian	WAH, PCR, SCR, QSRW	-
Sandlick Creek of Tradewater River	Camp Creek to Headwaters	Christian	WAH, PCR, SCR, QSRW	-
Tradewater River	Dripping Springs Branch to Buntin Lake Dam	Christian	WAH, PCR, SCR, QSRW	-
Unidentified Tributary of Piney Creek of Tradewater River	Mouth to Headwaters	Galdwell	WAH, PCR, SCR, QSRW	-
Unidentified Tributary of Sandlick Creek of Tradewater River	Mouth to Headwaters	Christian	WAH, PCR, SCR, QSRW	-
LOWER CUMBERLAND RIVER BASIN				
Casey Creek	Source to Little River	Trigg	GAH, PCR, SCR	-
Crooked Creek of Cumberland River	Energy Lake Backwaters to Headwaters	Trigg	WAH, PCR, SCR, QSRW	-
Donaldson Creek of Cumberland River	Craig Branch to Unidentified Tributary	Trigg	WAH, PCR, SCR, QSRW	-
Elk Creek of Red River of Cumberland River	Tennessee State Line to Dry Branch	Todd	WAH, PCR, SCR, QSRW	-
Skinframe Creek	Source to Livingston Creek	Lyon	GAH, PCR, SCR	-
Sugar Creek of Cumberland River	Lick Creek to Unidentified Tributary	Livingston	WAH, PCR, SCR, QSRW	-
Sulphur Spring Creek	Source to Red River	Simpson	GAH, PCR, SCR	-
West Fork of Red River	River Mile 32.2 to Kentucky/Tennessee State Line (River Mile 14.6)	Christian	GAH, PCR, SCR, QSRW	-
Whipperwill Creek	Source to Red River	Logan/Todd	WAH, PCR, SCR, QSRW	-

UPPER CUMBERLAND RIVER BASIN				
Acorn Fork of Stinking Creek	Basin above River Mile 1.0	Knox	WAH, PCR, SCR, OSRW	-
Adams Branch of Pigeon Roost Creek	Basin	Whitley	WAH, PCR, SCR, OSRW	-
Archers Creek of Cumberland River	Basin	Whitley	WAH, PCR, SCR, OSRW	-
Bad Branch of Poor Fork of Cumberland River	Basin	Letcher	GAH, PCR, SCR, OSRW	-
Bark Camp Creek of Cumberland River	Basin	Whitley	GAH, PCR, SCR, OSRW	-
Barren Fork of Indian Creek	Basin	McCreary	GAH, PCR, SCR, OSRW	-
Beaver Creek of Cumberland River	Basin	McCreary	GAH, PCR, SCR, OSRW	-
Beo Lick Creek of Brushy Creek of Buck Creek	Mouth to Warren Branch	Pulaski	WAH, PCR, SCR, OSRW	-
Bens Fork of Little Clear Creek	Basin	Bell	WAH, PCR, SCR, OSRW	-
Big Branch of Marsh Creek	Basin above River Mile 0.8	McCreary	WAH, PCR, SCR, OSRW	-
Big Lick Branch of Cumberland River	Basin	Pulaski	WAH, PCR, SCR, OSRW	-
Blacksnake Branch of Brownies Creek	Basin	Bell	WAH, PCR, SCR, OSRW	-
Breedens Creek of Clover Fork of Cumberland River	Basin	Harlan	WAH, PCR, SCR, OSRW	-
Brices Creek of Road Fork of Stinking Creek	Basin	Knox	WAH, PCR, SCR, OSRW	-
Brownies Creek of Cumberland River	Basin above Blacksnake Branch	Harlan	WAH, PCR, SCR, OSRW	-
Brush Creek of Roundstone Creek	Wolf Creek to Reemergence of Sinking Creek	Rockcastle	WAH, PCR, SCR, OSRW	-
Brushy Creek of Buck Creek	Mouth to Headwaters	Pulaski	WAH, PCR, SCR, OSRW	-
Buck Creek of Cumberland River	0.8 river mile upstream of confluence of Hurricane Creek to River Mile 11.7 (Backwaters of Lake Cumberland)	Pulaski	WAH, PCR, SCR, OSRW	-
Buck Creek of Clear Fork of Cumberland River	Basin	Whitley	WAH, PCR, SCR, OSRW	-
Bucks Branch of Jelliso Creek	Basin	Whitley	WAH, PCR, SCR, OSRW	-
Buffalo Creek of Laurel Fork of Clear Fork of Cumberland River	Basin above Kentucky/Tennessee State Line (River Mile 2.0)	Whitley	WAH, PCR, SCR, OSRW	-
Bunches Creek of Cumberland River	Basin	Whitley	GAH, PCR, SCR, OSRW	-

Straight Creek			OSRW	
Looney Creek of Poor Fork of Cumberland River	Basin above River Mile 5.3 (Lynch City Limits)	Harlan	GAH, PCR, SCR	-
Marsh Creek	Basin above River Mile 24.6 (Confluence with Murphy Creek) (within Kentucky)	McCreary	WAH, PCR, SCR, OSRW	-
Marsh Creek	River Mile 24.0 (Confluence with Murphy Creek) to confluence with Cumberland River	McCreary	WAH, PCR, SCR, OSRW	-
Martins Fork	Basin above River Mile 34.5 (Cumberland Gap National Historical Park Boundary)	Bell	GAH, PCR, SCR	-
Martins Fork	River Mile 31.4 (Cumberland Gap National Historical Park Boundary) to River Mile 27.2	Bell, Harlan	GAH, PCR, SCR, OSRW	-
McFarland Creek of Cumberland River	Little McFarland Creek to Spring Branch	Monroe	WAH, PCR, SCR, OSRW	-
Meadow Fork of Franks Creek	Basin	Letcher	WAH, PCR, SCR, OSRW	-
Meshack Creek of Cumberland River	Mouth to Pitcock Branch	Monroe	WAH, PCR, SCR, OSRW	-
Middle Fork of Rockcastle River	River Mile 7.9 (confluence of Indian Creek and Laurel Fork) to confluence of the Middle Fork and South Fork of Rockcastle River	Jackson	WAH, PCR, SCR, OSRW	-
Mill Branch of Stinking Creek	Basin	Knox	WAH, PCR, SCR, OSRW	-
Mill Creek of Straight Creek	Basin	Bell	WAH, PCR, SCR, OSRW	-
Mill Creek of Cumberland River	Basin	McCreary	WAH, PCR, SCR, OSRW	-
Moore's Creek of Stinking Creek	Basin	Knox	WAH, PCR, SCR, OSRW	-
Mud Creek of Clear Fork of Cumberland River	Basin above River Mile 6.5 (0.3 river miles above Siler Cemetery Road Bridge)	Whitley	WAH, PCR, SCR, OSRW	-
Mud Camp Creek of Cumberland River	Mouth to Collins Branch	Cumberland	WAH, PCR, SCR, OSRW	-
Mud Camp Creek of Cumberland River	Unidentified Tributary to Headwaters	Cumberland/ Monroe	WAH, PCR, SCR, OSRW	-
Mud Lick of Stinking Creek	Basin	Knox	WAH, PCR, SCR, OSRW	-
Ned Branch of Rockcastle River	Basin	Laurel	WAH, PCR, SCR, OSRW	-
Otter Creek of Cumberland River	Lake Cumberland Backwaters to Carpenter Fork	Wayne	WAH, PCR, SCR, OSRW	-
Patterson Creek of Cumberland River	Basin above River Mile 7.3 (confluence with Rose Creek)	Whitley	WAH, PCR, SCR, OSRW	-

Poor Fork of Cumberland River	Franks Creek to River Mile 48.1 (at Joseph Road off of Hwy 932)	Letcher	WAH, PCR, SCR, OSRW	-
Poor Fork of Cumberland River	Basin above River Mile 48.1 (at Joseph Road off of Hwy 932)	Letcher	CAH, PCR, SCR, OSRW	-
Presley House Branch of Poor Fork of Cumberland River	Mouth to Headwaters	Letcher	WAH, PCR, SCR, OSRW	-
Puncheoncamp Branch of Rock Creek of South Fork of Cumberland River	Mouth to Headwaters	McCreary	WAH, PCR, SCR, OSRW	-
Richland Creek of Cumberland River	Basin above River Mile 15.8 (0.5 stream miles above Hubbard Branch)	Knox	WAH, PCR, SCR, OSRW	-
Roaring Fork of Stinking Creek	Basin	Knox	WAH, PCR, SCR, OSRW	-
Rock Creek of Little South Fork of Cumberland River	Kentucky/Tennessee State Line (River Mile 21.5) to White Oak Creek	McCreary	CAH, PCR, SCR, OSRW	-
Rock Creek of Jellico Creek	Basin	McCreary	WAH, PCR, SCR, OSRW	-
Rockcastle River	River Mile 49.8 (confluence of Middle Fork and South Fork Rockcastle River) to River Mile 8.5 (backwaters of Lake Cumberland)	Laurel/Pulaski	WAH, PCR, SCR, OSRW	-
Ross Branch of Jellico Creek	Basin	Whitley	WAH, PCR, SCR, OSRW	-
Roundstone Creek of Rockcastle River	River Mile 26.3 (Interstate I 75) to River Mile 13.4 (confluence of Renfro Creek)	Rockcastle	WAH, PCR, SCR, OSRW	-
Ryans Creek of Jellico Creek	Basin	Whitley	WAH, PCR, SCR, OSRW	-
Sanders Creek of Cumberland River	Basin	Whitley	WAH, PCR, SCR, OSRW	-
Shillalah Creek of Clear Fork of Yellow Creek	Source to Cumberland Gap National Historical Park Boundary	Bell	CAH, PCR, SCR, OSRW	-
Shillalah Creek of Clear Fork of Yellow Creek	Cumberland Gap National Historical Park Boundary to Mouth	Bell	WAH, PCR, SCR, OSRW	-
Shut-in Branch of Jellico Creek	Basin	McCreary	WAH, PCR, SCR, OSRW	-
Sinking Creek	Source to Rockcastle River	Laurel	WAH, PCR, SCR, OSRW	-
Sims Fork of Left Fork of Straight Creek	Basin	Bell	WAH, PCR, SCR, OSRW	-
Smith Creek of Franks Creek	Basin	Letcher	WAH, PCR, SCR, OSRW	-
South Fork of Cumberland River	River Mile 54.1 (Kentucky/Tennessee State Line) to River Mile 45.7 (Blue Heron)	McCreary	WAH, PCR, SCR, OSRW	-
South Fork of Rockcastle River	River Mile 2.1 to White Oak Creek	Laurel	WAH, PCR, SCR, OSRW	-
South Fork of Rockcastle River	River Mile 2.1 to Rockcastle River	Rockcastle	WAH, PCR, SCR, OSRW	-

Ohio River	River Mile 940.7 to River Mile 943.3	McCracken	WAH, PCR, SCR, OSRW	-
Ohio River	River Mile 948.2 to River Mile 949.5	McCracken	WAH, PCR, SCR, OSRW	-
Ohio River	River Mile 960.0 to River Mile 962.7 (above Lock and Dam 53)	Ballard	WAH, PCR, SCR, OSRW	-
Ohio River	River Mile 966.3 to River Mile 969.5	Ballard	WAH, PCR, SCR, OSRW	-
Ohio River	River Mile 922.0 to River Mile 923.5 (Channel East of Towhead Island)	Livingston	WAH, PCR, SCR, OSRW	-
Otter Creek	River Mile 9.7 to Ohio River	Meade	CAH, PCR, SCR	-
Paddy's Run	Source to Ohio River	Jefferson	PCR, SCR	401 KAR 5:031 Section 2(1)(d) and 2(2) do not apply.
Second Creek	Ohio River Backwaters to Headwaters	Boone	WAH, PCR, SCR, OSRW	-
Sinking Creek	Source to Hwy 259 (River Mile 3.8)	Breckinridge	CAH, PCR, SCR	-
Unidentified Tributary of Big Sugar Creek	I-71 to Headwaters	Gallatin	WAH, PCR, SCR, OSRW	-
Unidentified Tributary of (Blue) Spring Ditch	Mouth to Headwaters	Jefferson	MWAH	-
Unidentified Tributary of Corn Creek	Mouth to Headwaters	Trimble	WAH, PCR, SCR, OSRW	-
Unidentified Tributary of Massae Creek	Mouth to Headwaters	McCracken	WAH, PCR, SCR, OSRW	-
West Fork of Massae Creek	SR 726 to Little Massae Creek	McCracken	WAH, PCR, SCR, OSRW	-
White Oak Creek	River Mile 1.08 to Ohio River	Greenup	SCR	401 KAR 5:031 Section 2(1)(d) and 2(2) do not apply.
Yellowbank Creek	Ohio River Backwaters to Headwaters	Breckinridge	WAH, PCR, SCR, OSRW	-
<b>LAKES AND RESERVOIRS</b>				
Metropolis	Entire Lake	McCracken	WAH, PCR, SCR, OSRW	-
MISSISSIPPI RIVER BASIN (Main Stem and Minor Tributaries)	-	-	-	-
Bayou de Chien	Source to River Mile 15.4	Hickman/ Graves	WAH, PCR, SCR, OSRW	-
Cane Creek of Bayou de Chien	Basin	Graves	WAH, PCR, SCR, OSRW	-
Jackson Creek of Bayou de Chien	Basin	Graves	WAH, PCR, SCR, OSRW	-
Jackson Creek	Mouth to Headwaters	Graves	WAH, PCR, SCR, OSRW	-



Mississippi River	River Mile 935.0 to River Mile 930.0	Carlisle	WAH, PCR, SCR, OSRW	-
Mississippi River	River Mile 947.0 to River Mile 945.0	Carlisle	WAH, PCR, SCR, OSRW	-
Obion Creek	Hurricane Creek to Little Creek	Hickman	WAH, PCR, SCR, OSRW	-
Sand Creek of Bayou de Chien	Basin	Graves	WAH, PCR, SCR, OSRW	-
South Fork of Bayou de Chien	Basin	Graves	WAH, PCR, SCR, OSRW	-
Terrapin Creek	Tennessee State Line to Headwaters	Graves	WAH, PCR, SCR, OSRW	-
LAKES AND RESERVOIRS				
Murphy's Pond	Entire Pond and Preserve Area	Hickman	WAH, PCR, SCR, OSRW	-
Swan Pond	Entire Lake	Ballard	WAH, PCR, SCR, OSRW	-

[SURFACE WATER USE DESIGNATIONS]				
Water Body	Zone	County	Use Designation	Exceptions To Specific Criteria
-				
BIG SANDY RIVER BASIN				
Big Sandy River	River Mile 26.8 to Ohio River	Boyd	WAH, PCR, SCR	-
Hood Creek	Source to Wheeler Branch	Lawrence	WAH, PCR, SCR	-
Levisa Fork of Big Sandy River	Kentucky Virginia State Line to River Mile 147.5 (Headwaters of Fishtrap Lake)	Pike	WAH, PCR, SCR, DWS	-
Levisa Fork of Big Sandy River	River Mile 126.6 (Fishtrap Lake Dam) to Big Sandy River	Lawrence	WAH, PCR, SCR, DWS	-
Paint Creek of Levisa Fork	River Mile 8.3 (Paintsville Lake Dam) to Levisa Fork	Johnson	CAH, PCR, SCR	-
Russell Fork of Big Sandy River	Kentucky Virginia State Line (River Mile 15.9) to Levisa Fork	Pike	WAH, PCR, SCR, DWS	-
Tug Fork of Big Sandy River	Kentucky Virginia State Line (River Mile 94.0) to Big Sandy River	Lawrence	WAH, PCR, SCR, DWS	-
LAKES AND RESERVOIRS				
Dewey	Entire reservoir	Floyd	WAH, PCR, SCR, DWS	-
Fishtrap	Entire reservoir	Pike	WAH, PCR, SCR, DWS	-
Paintsville	Entire reservoir	Johnson	WAH, CAH, PCR, SCR	-
LITTLE SANDY RIVER BASIN				
Big Caney Creek	Source to Grayson Lake	Elliott	CAH, PCR, SCR	-
Big Sinking Creek	River Mile 6.0 to Little Sandy River	Garter	WAH, PCR, SCR	-
Laurel Creek	Source to Little Sandy River	Elliott	CAH, PCR, SCR	-
Little Sandy River	Source to River Mile 71.4 (Headwaters of Grayson Lake)	Elliott	WAH, PCR, SCR, DWS	-

Little Sandy River	River Mile 50.0 (Grayson Lake Dam) to Ohio River	Greenup	WAH, PCR, SCR, DWS	-
LAKES AND RESERVOIRS				
Grayson	Entire Reservoir	Carter	WAH, PCR, SCR	-
Greenbo	Entire Reservoir	Greenup	WAH, CAH, PCR, SCR, DWS	-
TYGARTS CREEK BASIN				
Buffalo Creek	Source to Tygarts Creek	Carter	WAH, PCR, SCR	-
Little White Oak Creek	Source to Tygarts Creek	Greenup	WAH, PCR, SCR	-
Tygarts Creek	Source to Ohio River	Greenup	WAH, PCR, SCR, DWS	-
White Oak Creek	Source to Tygarts Creek	Greenup	WAH, PCR, SCR	-
LICKING RIVER BASIN				
Burning Fork	Basin	Magoffin	WAH, PCR, SCR	-
Crane Creek	Source to North Fork of Licking River	Rowan/ Morgan	CAH, PCR, SCR	-
Fleming Creek	Source to Licking River	Nicholas	WAH, PCR, SCR	-
Licking River	Source to River Mile 218.2 (Headwaters of Cave Run Lake)	Morgan	WAH, PCR, SCR, DWS	-
Licking River	River Mile 176.8 (Cave Run Lake Dam) to River Mile 169.6 (U.S. Highway 60 Bridge)	Bath/Rowan	CAH, PCR, SCR, DWS	-
Licking River	River Mile 169.6 to River Mile 165.0	Bath/Rowan	WAH, PCR, SCR, DWS	-
Licking River	River Mile 165.0 to River Mile 154.5	Bath/Rowan	WAH, PCR, SCR, OSRW	-
Licking River	River Mile 154.5 to River Mile 115.0	Nicholas/ Bourbon	WAH, PCR, SCR, DWS	-
Licking River	River Mile 115.0 to River Mile 18.9	Kenton/ Campbell	WAH, PCR, SCR, DWS, OSRW	-
Licking River	River Mile 18.9 to Ohio River	Kenton/ Campbell	WAH, PCR, SCR, DWS	-
Minor Creek	River Mile 2.0 to Crane Creek	Morgan/Rowan	CAH, PCR, SCR	-
North Fork of Licking River	Source to Licking River	Pendleton/ Bracken	WAH, PCR, SCR, DWS	-
Slabcamp Creek	Basin including Stoneseal Branch	Rowan	CAH, PCR, SCR	-
Slate Creek	Source to Licking River	Bath	WAH, PCR, SCR, DWS	-
South Fork of Licking River	River Mile 65.1 to Licking River	Pendleton	WAH, PCR, SCR, DWS	-
LAKES AND RESERVOIRS				
Cave Run	Entire Reservoir	Rowan/Bath	WAH, PCR, SCR	-
KENTUCKY RIVER BASIN				
Bailey Run	Basin	Anderson	WAH, PCR, SCR	-
Buck Lick Branch	Basin	Lee	WAH, PCR, SCR	-
Gedar Brook	Basin	Anderson	WAH, PCR, SCR	-
Chimney Top Creek	Basin	Wolfe	CAH, PCR, SCR	-

Clarks Run	Source to Herrington Lake	Boyle	WAH, PCR, SCR	-
Dix River	Source to River Mile 33.1 (Headwaters of Herrington Lake)	Boyle/ Garrard	WAH, PCR, SCR	-
Dix River	Herrington Lake Dam to Kentucky River	Garrard/ Mercer	GAH, PCR, SCR	-
Dog Fork	Basin	Wolfe	GAH, PCR, SCR	-
East Fork of Indian Creek	Source to Indian Creek	Menifee	GAH, PCR, SCR	-
Gladie Creek	Basin	Menifee	GAH, PCR, SCR	-
Hanging Fork Creek	Source to Dix River	Boyle/Lincoln	WAH, PCR, SCR	-
Indian Creek	River Mile 5.2 to River Mile 1.2	Menifee	GAH, PCR, SCR	-
Kentucky River	River Mile 254.8 to Ohio River	Garroll	WAH, PCR, SCR, DWS	-
Middle Fork of Kentucky River	Source to River Mile 76.6 (Headwaters of Buckhorn Lake)	Leslie	WAH, PCR, SCR	-
Middle Fork of Kentucky River	River Mile 43.2 (Buckhorn Lake Dam) to North Fork of Kentucky River	Lee	WAH, PCR, SCR	-
Middle Fork of Red River	Source to River Mile 10.6	Powell	GAH, PCR, SCR	-
North Fork of Kentucky River	Source to Kentucky River	Lee	WAH, PCR, SCR, DWS	-
Parched Corn Creek	Source to Red River	Wolfe	GAH, PCR, SCR	-
Red River	Source to River Mile 68.6	Menifee/ Wolfe	WAH, PCR, SCR	-
Red River	River Mile 68.6 to River Mile 49.2	Menifee/ Wolfe	WAH, PCR, SCR, OSRW	-
Red River	River Mile 49.2 to Kentucky River	Clark/Estill	WAH, PCR, SCR, DWS	-
Ross Creek	Source to Kentucky River	Lee	WAH, PCR, SCR	-
Silver Creek	Source to Kentucky River	Madison	WAH, PCR, SCR	-
South Fork of Elkhorn Creek	Source to North Fork of Elkhorn Creek	Franklin	WAH, PCR, SCR	-
South Fork of Kentucky River	Source to Kentucky River	Lee	WAH, PCR, SCR, DWS	-
Swift Camp Creek	Source to Red River	Wolfe	GAH, PCR, SCR	-
Town Branch	Source to South Fork of Elkhorn Creek	Fayette	WAH, PCR, SCR	-
War Fork of Station Camp Creek	Source to River Mile 8.5	Jackson	WAH, PCR, SCR	-
War Fork of Station Camp Creek	River Mile 8.5 to River Mile 2.0	Jackson	GAH, PCR, SCR	-
War Fork of Station Camp Creek	River Mile 2.0 to Station Camp Creek	Jackson	WAH, PCR, SCR	-
LAKES AND RESERVOIRS				
Bert Combs	Entire Reservoir	Clay	WAH, GAH, PCR, SCR, DWS	-
Buckhorn	Entire Reservoir	Perry	WAH, PCR, SCR, DWS	-
Garr Fork	Entire Reservoir	Knott/Perry	WAH, PCR, SCR	-
Fishpond	Entire Reservoir	Letcher	WAH, GAH, PCR, SCR	-
Herrington	Entire Reservoir	Garrard/Mercer	WAH, PCR, SCR, DWS	-

Mill Creek	Entire Reservoir	Wolfe	WAH, <del>CAH</del> , <del>PCR</del> , SCR, DWS	-
SALT RIVER BASIN				
Beech Fork of Salt River	Source to Salt River	Hardin/Bullitt	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-
Chenoweth Run	Source to Floyds Fork	Jefferson	WAH, PCR, SCR	-
Currys Fork	Confluence of South and North Forks to Floyds Fork	Oldham	WAH, PCR, SCR	-
Floyds Fork	Source to Salt River	Bullitt	WAH, PCR, SCR	-
Mill Creek	Source to Salt River	Bullitt	WAH, PCR, SCR	-
North Fork of Currys Fork	Source to South Fork of Currys Fork	Oldham	WAH, PCR, SCR	-
Rolling Fork of Salt River	Source to River Mile 62.5	Larue <del>and</del> Nelson	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-
Rolling Fork of Salt River	River Mile 62.5 to River Mile 53.6	Larue <del>and</del> Nelson	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Rolling Fork of Salt River	River Mile 53.6 to Salt River	Larue <del>and</del> Nelson	WAH, PCR, SCR	-
Rolling Fork of Salt River	Source to Salt River	Bullitt	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-
Salt River	Source to River Mile 74.8 (Headwaters of Taylorsville Lake)	Anderson	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-
Salt River	River Mile 60.1 (Taylorsville Lake Dam) to Ohio River	Hardin/ Jefferson	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-
Unnamed tributary to Mill Creek	Source to Mill Creek at River Mile 44.8	Bullitt	WAH, PCR, SCR	-
LAKES AND RESERVOIRS				
Taylorsville	Entire Reservoir	Spencer	WAH, PCR, SCR	-
GREEN RIVER BASIN				
Barren River	Source to River Mile 118.5 (Headwaters of Barren River Lake)	Allen	WAH, PCR, SCR	-
Barren River	River Mile 70.1 (Barren River Lake Dam) to River Mile 15.0	Warren	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-
Barren River	River Mile 15.0 to Green River	Butler/Warren	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Beaverdam Creek	Source to Green River	Edmonson	CAH, PCR, SCR	-
Big Pitman Creek	Source to Green River	Green	WAH, PCR, SCR	-
Black Lick Creek	Source to Clear Fork	Logan	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-
Buck Horn Creek	Source to Little Pitman Creek	Taylor	WAH, PCR, SCR	-
Buffalo Creek	Source to Green River (in Mammoth Cave National Park)	Edmonson	WAH, PCR, SCR	-
Gypress Creek	Source to Pond River	McLean	WAH, PCR, SCR	-
Drakes Creek	Confluence of West Fork and Middle Fork to Barren River	Warren	WAH, PCR, SCR	-
Gasper River	Source to Barren River	Warren	WAH, PCR, SCR	-
Green River	Source to River Mile 340.1 (Headwaters of Green River Lake)	Adair	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-
Green River	River Mile 305.6 (Green River Lake)	Hart	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-

	Dam) to River Mile 207.8		OSRW, DWS	
Green River	River Mile 207.8 to River Mile 181.7	Edmonson	WAH, PCR, SCR, OSRW	-
Green River	River Mile 181.7 to River Mile 168.0	Butler/ Warren	WAH, PCR, SCR, DWS	-
Green River	River Mile 168.0 to River Mile 148.0	Butler	WAH, PCR, SCR, OSRW	-
Green River	River Mile 148.0 to Ohio River	Henderson	WAH, PCR, SCR, DWS	-
Lick Creek	Source to West Fork of Drakes Creek	Simpson	GAH, PCR, SCR	-
Little Pitman Creek	Source to Big Pitman Creek	Green	WAH, PCR, SCR	-
Lynn Camp Creek	Source to Green River	Hart	GAH, PCR, SCR	-
Middle Pitman Creek	Source to Big Pitman Creek	Green	WAH, PCR, SCR	-
Underground River System	Mammoth Cave National Park	Edmonson/ Hart/Barren	GAH, PCR, SCR, OSRW	-
Turnhole Spring	Basin Outside Mammoth Cave National Park Boundary	Edmonson/ Barren	GAH, PCR, SCR, OSRW	-
Echo River	Basin Outside Mammoth Cave National Park Boundary	Edmonson	GAH, PCR, SCR, OSRW	-
Pike Spring	Basin Outside Mammoth Cave National Park Boundary	Edmonson	GAH, PCR, SCR, OSRW	-
Mile 205.7 Spring	Basin Outside Mammoth Cave National Park Boundary	Hart	GAH, PCR, SCR, OSRW	-
McCoy Spring	Basin Outside Mammoth Cave National Park Boundary	Hart	GAH, PCR, SCR, OSRW	-
Suds Spring	Basin Outside Mammoth Cave National Park Boundary	Hart/Barren	GAH, PCR, SCR, OSRW	-
Double Sink Spring	Basin Outside Mammoth Cave National Park Boundary	Edmonson/ Barren	GAH, PCR, SCR, OSRW	-
Ganter Spring	Basin Outside Mammoth Cave National Park Boundary	Edmonson	GAH, PCR, SCR, OSRW	-
Running Spring	Basin Outside Mammoth Cave National Park Boundary	Edmonson	GAH, PCR, SCR, OSRW	-
Mud River	Source to Green River	Butler/ Muhlenberg	WAH, PCR, SCR	-
Nolin River	Source to River Mile 64.3 (Headwaters of Nolin Lake)	Hart/Grayson	WAH, PCR, SCR	-
Nolin River	River Mile 7.6 (Nolin Lake Dam) to Green River	Edmonson	GAH, PCR, SCR	-
Rough River	Source to River Mile 133.8 (Headwaters of Rough River Lake)	Hardin	WAH, PCR, SCR, DWS	-
Rough River	River Mile 89.3 (Rough River Lake Dam) to River Mile 88.5	Ohio/ Grayson	GAH, PCR, SCR, DWS	-
Rough River	River Mile 72.4 to Green River	McLean/Ohio	WAH, PCR, SCR, DWS	-
Rough River	River Mile 88.5 to River Mile 74.2	Ohio/ Grayson	WAH, PCR, SCR	-
Rough River	River Mile 74.2 to River Mile 73.6	McLean/Ohio	GAH, PCR, SCR	-

Rough River	River Mile 73.6 to Green River	Ohio/ Grayson	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-
Roundstone Creek	Source to Hwy 1140 (River Mile 3.5)	Hart	GAH, PCR, SCR	-
Sharp's Branch	Source to West Fork of Drakes Creek	Simpson	WAH, PCR, SCR	-
Trammel Fork	River <del>                    </del> Mile <del>                    </del> 30.15 (Kentucky/Tennessee State Line) to Hwy 31E (River Mile 23.6)	Allen	GAH, PCR, SCR	-
Trammel Fork	River Mile 23.6 to Drakes Creek	Warren	WAH, PCR, SCR	-
West Fork of Drakes Creek	Source to Confluence with Middle Fork of Drakes Creek	Warren	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-
Wiggington Creek	Source to Gasper River	Logan	WAH, PCR, SCR	-
LAKES AND RESERVOIRS				
Barren River	Entire Reservoir	Barren/Allen	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-
Green River	Entire Reservoir	Taylor	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-
Nolin	Entire Reservoir	Edmonson	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-
Rough River	Entire Reservoir	Breckinridge/ Grayson	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-
LOWER CUMBERLAND RIVER BASIN				
Gasey Creek	Source to Little River	Trigg	GAH, PCR, SCR	-
Gumberland River	River Mile 30.8 (Lake Barkley Dam) to Ohio River	Livingston	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-
Skinframe Creek	Source to Livingston Creek	Lyon	GAH, PCR, SCR	-
Sulphur Spring Creek	Source to Red River	Simpson	GAH, PCR, SCR	-
West Fork of Red River	River <del>                    </del> Mile <del>                    </del> 32.2 <del>                    </del> to Kentucky/Tennessee State Line (River Mile 14.5)	Christian	GAH, PCR, SCR	-
Whippoorwill Creek	Source to Red River	Logan	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
LAKES AND RESERVOIRS				
Barkley	Entire <del>                    </del> Reservoir <del>                    </del> from Kentucky/Tennessee State Line (River Mile 74.7)	Lyon/ Livingston	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-
TENNESSEE RIVER BASIN				
Tennessee River	River Mile 22.4 (Kentucky Lake Dam) to River Mile 12.0	Livingston/ McCracken	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Tennessee River	River Mile 12.0 to Ohio River	Livingston/ McCracken	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-
LAKES AND RESERVOIRS				
Kentucky	Entire <del>                    </del> Reservoir <del>                    </del> from Kentucky/Tennessee State Line (River Mile 62.4)	Livingston/ Marshall	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-
TRADEWATER RIVER BASIN				
Grab Orchard Creek/Vaughn Ditch	Source to Tradewater River	Webster	WAH, PCR, SCR	-
Montgomery Creek	Source to Tradewater River	Galdwell	WAH, PCR, SCR	-

Tradewater River	Source to Ohio River	Crittenden/ Union	WAH, PCR, SCR	-
OHIO RIVER BASIN (Main Stem and Minor Tributaries)				
Dee Run Creek	Source to Hwy 1628 (River Mile 5.15)	Meade	GAH, PCR, SCR	-
Ohio River	Big Sandy River (River Mile 317.1) to River Mile 848.0	Union	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-
Ohio River	River Mile 848.0 to River Mile 850.0	Union	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Ohio River	River Mile 850.0 to River Mile 859.0	Union	WAH, PCR, SCR	-
Ohio River	River Mile 859.0 to River Mile 861.0	Union	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Ohio River	River Mile 861.0 to River Mile 865.0	Union	WAH, PCR, SCR	-
Ohio River	River Mile 865.0 to River Mile 867.0	Union	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Ohio River	River Mile 867.0 to River Mile 940.7	McCracken	WAH, PCR, SCR	-
Ohio River	River Mile 940.7 to River Mile 943.3	McCracken	WAH, <del>PCR</del> , <del>SCR</del> , DWS, OSRW	-
Ohio River	River Mile 943.3 to River Mile 948.2	McCracken	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-
Ohio River	River Mile 948.2 to River Mile 949.5	Ballard	WAH, <del>PCR</del> , <del>SCR</del> , DWS, OSRW	-
Ohio River	River Mile 949.5 to River Mile 966.3	Ballard	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-
Ohio River	River Mile 966.3 to River Mile 969.5	Ballard	WAH, <del>PCR</del> , <del>SCR</del> , DWS, OSRW	-
Ohio River	River Mile 969.5 to Mississippi River	Ballard	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-
Ohio River	River Mile 922.0 to River Mile 923.5 (Channel East of Towhead Island)	Livingston	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Otter Creek	River Mile 9.7 to Ohio River	Meade	GAH, PCR, SCR	-
Paddy's Run	Source to Ohio River	Jefferson	PCR, SCR	401 — KAR 6:031, Section 2(1) (d) and (2) do not apply
Sinking Creek	Source to Hwy 259 (River Mile 4.0)	Breckinridge	GAH, PCR, SCR	-
White Oak Creek	River Mile 1.08 to Ohio River	Greenup	SCR	401 — KAR 6:031, Section 2(1) (d) and (2) do not apply
LAKES AND RESERVOIRS				
Metropolis	Entire Lake	McCracken	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Swan	Entire Lake	Ballard	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
MISSISSIPPI RIVER BASIN (Main Stem and Minor Tributaries)				
Bayou de Chien	Source to River Mile 13.0	Hickman	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-

			OSRW	
Cane Creek of Bayou de Chien	Basin	Graves	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Jackson Creek	Basin	Graves	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Sand Creek	Basin	Graves	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
South Fork of Bayou de Chien	Basin	Graves	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Mississippi River	Confluence with Ohio River to River Mile 947.0	Carlisle	WAH, PCR, SCR	-
Mississippi River	River Mile 947.0 to River Mile 945.0	Carlisle	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Mississippi River	River Mile 945.0 to River Mile 935.0	Carlisle	WAH, PCR, SCR	-
Mississippi River	River Mile 935.0 to River Mile 930.0	Carlisle	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Mississippi River	River Mile 930.0 to Kentucky/Tennessee State Line	Fulton	WAH, PCR, SCR	-
Murphy's Pond	Entire Pond and Preserve Area	Hickman	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
UPPER CUMBERLAND RIVER BASIN				
Acorn Fork	Basin above River Mile 1.0	Knox	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Adams Branch	Basin	Whitley	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Arehers Creek	Basin	Whitley	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Bad Branch	Basin	Letcher	GAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Bark Camp Creek	Basin	Whitley	GAH, PCR, SCR	-
Beaver Creek	Basin	McCreary	GAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Beaver Creek	Source to Lake Cumberland	Wayne	WAH, PCR, SCR	-
Beek's Creek	Basin	Whitley	WAH, PCR, SCR	-
Bennetts Fork of Yellow Creek	Basin (Kentucky/Tennessee State Line) above River Mile 5.0	Bell	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Bens Fork of Little Clear Creek	Basin	Bell	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Big Branch	Basin Above River Mile 0.8	McCreary	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Big Lick Branch	Basin	Pulaski	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Big South Fork of Cumberland River	River Mile 55.2 to River Mile 45.0	McCreary	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Blacksnake Branch	Basin	Bell	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Breedon's Creek	Basin	Harlan	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-



Brices Creek	Basin	Knox	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Brownies Creek	Basin to River Mile 10.0	Harlan	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Buck Creek	River Mile 53.3 to River Mile 10.5	Pulaski	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Buck Creek	Basin	Whitley	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Bucks Branch	Basin	Whitley	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Buffalo Creek	Basin to Kentucky/Tennessee State Line (River Mile 3.2)	Whitley	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Bunches Creek	Basin	Whitley	GAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Campbell Branch	Basin	Whitley	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Cane Creek	Basin	Laurel	WAH, PCR, SCR	-
Ganey Creek	Basin	Bell	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Gannon Creek	Basin above Gannon Creek Lake	Bell	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Glover Bottom Creek	River Mile 1.4 to Horseshoe Creek	Jackson	GAH, PCR, SCR	-
Gegur Fork	Basin	McCreary	GAH, PCR, SCR	-
Goles Branch	Basin	Knox	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Colliers Creek	Basin	Bell	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Griscillis Branch	Basin	Whitley	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Gumberland River	River Mile 694.2 to River Mile 574.6	Whitley	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-
Gumberland River	River Mile 574.6 to River Mile 558.5 (Headwaters of Lake Gumberland)	McCreary/ Whitley	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Gumberland River	River Mile 460.9 (Lake Gumberland Dam) to Kentucky/Tennessee State Line (River Mile 401.05)	Monroe	GAH, PCR, SCR, DWS	-
Davis Branch	Basin	Bell	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Difficulty Creek	Basin	McCreary	WAH, PCR, SCR	-
Deg Slaughter Creek	Basin	Whitley	GAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Eagle Creek	Basin	McCreary	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Four Mile Creek	Basin above River Mile 2.5	Bell	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Four Mile Run	Basin above River Mile 1.0	Bell	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Fugitt Creek	Basin	Harlan	GAH, PCR, SCR	-

Hale Fork	Basin	Knox	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Hawk Creek	Basin	Laurel	GAH, PCR, SCR	-
Hinkle Branch	Basin	Knox	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Honeycutt Branch	Basin	Knox	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Horse Lick Creek	River Mile 12.3 to Middle Fork of Rockcastle River	Jackson/ Rockcastle	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Hunting Shirt Branch	Basin	Knox	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Indian Creek	Source to Barren Fork	McCreary	GAH, PCR, SCR	-
Jennys Branch	Basin	McCreary	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Kelly Branch	Basin	Harlan	WAH, PCR, SCR	-
Kennedy Creek	River Mile 1.0 to Little South Fork of Cumberland River	Wayne	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Kilburn Fork of Indian Creek	Basin	McCreary	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Laurel Creek of Marsh Creek	River Mile 9.0 to River Mile 3.4	McCreary	GAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Laurel Fork	Source to Middle Fork of Rockcastle River	Jackson	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Laurel Fork of Clear Fork	Basin above River Mile 16.0	Bell	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Laurel Fork of Clear Fork	River Mile 16.0 to River Mile 4.25 (Kentucky/Tennessee State Line)	Whitley	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Laurel Fork of Indian Creek	Basin	McCreary	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Laurel River	Laurel River Lake Dam (River Mile 2.1) to River Mile 0.9	Laurel	GAH, PCR, SCR	-
Lick Fork	Basin	Bell	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Little Clear Creek	Basin from Confluence with Fuson Branch	Bell	WAH, PCR, SCR	-
Little Poplar Creek	Basin above and including East Ridge Branch	Knox	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Little South Fork of Cumberland River	River Mile 35.6 to River Mile 4.1	Wayne	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Little Yellow Creek	River Mile 3.2 (Fern Lake Dam) to Yellow Creek	Bell	WAH, PCR, SCR	-
Long Branch	Basin	Bell	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Looney Creek	Basin above River Mile 5.3	Harlan	GAH, PCR, SCR	-
Marsh Creek	Basin above River Mile 24.0	McCreary	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Marsh Creek	River Mile 24.0 to Confluence with	McCreary	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-

	Cumberland River		OSRW	
Martins Fork	Basin above River Mile 31.3	Harlan	GAH, PCR, SCR	-
Martin's Fork	River Mile 31.3 to River Mile 27.4	Harlan	GAH, PCR, SCR, OSRW	-
Meadow Fork	Basin	Letcher	WAH, PCR, SCR, OSRW	-
Middle Fork of Rockcastle River	River Mile 61.1 to River Mile 53.3	Jackson	WAH, PCR, SCR, OSRW	-
Mill Branch	Basin	Knox	WAH, PCR, SCR, OSRW	-
Mill Creek of Straight Creek	Basin	Bell	WAH, PCR, SCR, OSRW	-
Mill Creek	Basin	McCreary	WAH, PCR, SCR, OSRW	-
Moore's Creek	Basin	Knox	WAH, PCR, SCR, OSRW	-
Mud Creek	Basin above River Mile 6.5	Whitley	WAH, PCR, SCR, OSRW	-
Mud Lick	Basin	Knox	WAH, PCR, SCR, OSRW	-
Ned Branch	Basin	Laurel	WAH, PCR, SCR, OSRW	-
Patterson Creek	Basin above River Mile 7.4	Whitley	WAH, PCR, SCR, OSRW	-
Peer Fork of Cumberland River	Basin above River Mile 742.5	Letcher	GAH, PCR, SCR, OSRW	-
Peer Fork of Cumberland River	River Mile 742.5 to Jefferson National Forest Boundary (River Mile 720.55)	Harlan	WAH, PCR, SCR	-
Peer Fork of Cumberland River	River Mile 720.55 to Clover Fork of Cumberland River	Harlan	WAH, PCR, SCR, DWS	-
Razor Fork	Basin	Harlan	WAH, PCR, SCR	-
Richland Creek	Basin above River Mile 15.7	Knox	WAH, PCR, SCR, OSRW	-
Rearing Fork	Basin	Knox	WAH, PCR, SCR, OSRW	-
Reek Creek	Kentucky/Tennessee State Line (River Mile 21.9) to White Oak Creek	McCreary	GAH, PCR, SCR, OSRW	-
Reek Creek	Basin from confluence with Jellies Creek	McCreary	WAH, PCR, SCR, OSRW	-
Rockcastle River	River Mile 53.3 to River Mile 8.5	Laurel/ Pulaski	WAH, PCR, SCR, OSRW	-
Ross Branch	Basin	Whitley	WAH, PCR, SCR, OSRW	-
Roundstone Creek	Source to River Mile 13.5	Rockcastle	WAH, PCR, SCR	-
Roundstone Creek	River Mile 13.5 to River Mile 4.7	Rockcastle	WAH, PCR, SCR, OSRW	-
Roundstone Creek	River Mile 4.7 to Rockcastle River	Rockcastle	WAH, PCR, SCR, DWS	-

Ryans-Creek	Basin	Whitley	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Sanders-Creek	Basin	Whitley	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Shillalah-Creek	Source to Cumberland Gap National Historical Park Boundary	Bell	CAH, PCR, SCR	-
Shut-in Branch	Basin	McCreary	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Sinking-Creek	Source to Rockcastle River	Laurel	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Sims-Fork	Basin	Bell	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Smith-Creek	Basin	Letcher	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
South Fork of Rockcastle River	River Mile 2.1 to Rockcastle River	Rockcastle	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Stevenson Branch	Basin	Bell	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Stony Fork of Bennetts Fork	Basin above River Mile 2.2	Bell	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Straight-Creek	Basin	Harlan	WAH, PCR, SCR	-
Sugar Run	Source to Cumberland Gap National Historical Park Boundary	Bell	WAH, PCR, SCR	-
Trace Branch	Basin	Knox	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Trammel Fork	Basin	McCreary	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Troublesome-Creek	Basin	McCreary	WAH, PCR, SCR	-
Turkey-Creek	Basin	Knox	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Tyes Fork of Bennetts Fork	Basin	Whitley	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
Watts-Creek	Basin above Camp Blanton Lake	Harlan	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
White Oak-Creek	Basin above River Mile 1.2 (includes Little White Oak Creek)	Laurel	CAH, PCR, SCR	-
Wood-Creek	River Mile 4.0 (Wood-Creek Lake Dam) to Hazel Patch-Creek	Laurel	CAH, PCR, SCR	-
Yellow-Creek	Source to Cumberland River	Bell	WAH, PCR, SCR	-
Youngs-Creek	Basin	Whitley	WAH, <del>PCR</del> , <del>SCR</del> , OSRW	-
<b>LAKES AND RESERVOIRS</b>				
Beulah (=Tyner)	Entire Reservoir	Jackson	WAH, <del>CAH</del> , <del>PCR</del> , SCR, DWS	-
Gannon-Creek	Entire Reservoir	Bell	WAH, <del>CAH</del> , <del>PCR</del> , SCR, DWS	-
Cumberland	Entire Reservoir	Pulaski	WAH, <del>PCR</del> , <del>SCR</del> , DWS	-

<del>Dale Hollow</del>	<del>Entire portion of Reservoir within Kentucky</del>	<del>Clinton/Cumberland</del>	<del>WAH, PCR, SCR, DWS</del>	<del>-</del>
<del>Laurel River</del>	<del>Entire Reservoir</del>	<del>Laurel/Whitley</del>	<del>WAH, CAH, PCR, SCR, DWS</del>	<del>-</del>
<del>Martins Fork</del>	<del>Entire Reservoir</del>	<del>Harlan</del>	<del>WAH, PCR, SCR</del>	<del>-</del>
<del>Wood Creek</del>	<del>Entire Reservoir</del>	<del>Laurel</del>	<del>WAH, CAH, PCR, SCR, DWS]</del>	<del>-</del>

Section 6. Incorporation by Reference. (1) "Interim Economic Guidance for Water Quality Standards Workbook", EPA, March 1995 Publication EPA-823-B-95-002, U.S. Environmental Protection Agency, Office of Water, Washington, D.C., is incorporated by reference.

(2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Kentucky Division of Water, 200 Fair Oaks Lane [14 Reilly Road], Frankfort, Kentucky, Monday through Friday, 8 a.m. to 4:30 p.m.

LEONARD K. PETERS, Secretary

APPROVED BY AGENCY: September 11, 2008

FILED WITH LRC: September 12, 2008 at noon

CONTACT PERSON: Abigail Powell, Regulations Coordinator, Division of Water, 14 Reilly Road, Frankfort, Kentucky 40601, phone (502) 564-3410, fax (502) 564-0111, email Abigail.Powell@ky.gov.

#### REGULATORY IMPACT ANALYSIS AND TIERING STATEMENT

Contact Person: Sandy Gruzesky

(1) Provide a brief summary of:

(a) What this administrative regulation does: This administrative regulation lists the types of designated uses for surface waters of the Commonwealth, provides for redesignation of surface waters, describes the process for redesignation of surface waters, and lists designated uses for specific surface waters of the Commonwealth that have been assigned designated uses.

(b) The necessity of this administrative regulation: This administrative regulation is necessary to inform the reader of the types of designated use categories for surface waters of the Commonwealth, to provide for redesignation of surface waters, and to list designated uses assigned to surface waters. The list of designated uses assigned to specific surface waters of the Commonwealth is a reference tool necessary for the reader to identify which designated uses apply to specific surface waters.

(c) How this administrative regulation conforms to the content of the authorizing statutes: This administrative regulation conforms to KRS 224.10-100, which requires the cabinet to develop and conduct a comprehensive program for the management of water resources and to provide for the prevention, abatement, and control of pollution. This administrative regulation and 401 KAR 10:001, 10:029, 10:030, and 10:031 establish procedures to protect the surface waters of the Commonwealth and thus manage water resources and prevent water pollution. This administrative regulation also makes all surface waters subject to the general criteria specified in 401 KAR 10:031, Section 2.

(d) How this administrative regulation currently assists or will assist in the effective administration of the statutes: This administrative regulation will assist in the effective administration of statutes by providing for redesignation of surface waters and by listing the designated uses assigned to specific waters of the Commonwealth. Having the designated uses listed in this way will enable the reader to know which regulatory criteria relate to which water. This information is supportive to achieving compliance with administrative regulations.

(2) If this is an amendment to an existing administrative regulation, provide a brief summary of:

(a) How the amendment will change this existing administrative regulation: This amendment alphabetizes table headings in this administrative regulation. This amendment creates a new table, Table B, which indicates specific locations (latitude or longitude and river mile) of 183 surface water intakes and thus the exact locations where domestic water supply criteria in 10:031, Section 6, are applicable. It adds 233 previously unlisted outstanding state resource waters and removes 2 previously listed outstanding state resource waters because of faulty location records for federally threatened and endangered species. This amendment also removes 74 surface waters from the previous table of Surface Water Use Designations that had only the default uses of Warm Water Aquatic Life, Domestic Water Supply, and Primary and Secondary Contact Recreation so that only waters with non-default uses (Outstanding State Resource Waters and Cold Water Aquatic Habitat) are listed.

(b) The necessity of the amendment to this administrative regulation: This amendment is necessary to more fully protect the

Commonwealth's best waters by adding 233 waters to the Outstanding State Resource Water use and removes 2 previously listed outstanding state resource waters because of faulty location records for federally threatened and endangered species. The amended regulation will be more user-friendly by omitting 74 waters from the table that only have default uses, leaving only those waters with non-default uses in Table B.

(c) How the amendment conforms to the content of the authorizing statutes: This amendment conforms to KRS 224.10-100 that requires the cabinet to develop and conduct a comprehensive program for the management of water resources and to provide for the prevention, abatement, and control of pollution. This amendment and 401 KAR 10:002, 10:029, 10:030, and 10:031 establish procedures to protect the surface waters of the Commonwealth. This amendment applies the standards to protect designated uses described in 401 KAR 10:031 to surface waters of the Commonwealth.

(d) How the amendment will assist in the effective administration of the statutes: This amendment updates waters listed in specific designated uses based on the most recent scientific information. It also adds 233 of the state's best waters to the outstanding State Resource Water use.

(3) List the type and number of individuals, businesses, organizations, or state and local governments affected by this administrative regulation: This administrative regulation applies to designated uses to the surface waters of the Commonwealth. All individuals, businesses, organizations, and governments that use the Commonwealth's surface waters for residential, commercial, industrial, or recreational purposes could be impacted by this regulation. This administrative regulation may affect the wastewater treatment operations of local governments if they will have new or expanded discharges into surface waters of the Commonwealth.

(4) Provide an analysis of how the entities identified in question (3) will be impacted by either the implementation of this administrative regulation, if new, or by the change, if it is an amendment, including:

(a) List the actions that each of the regulated entities identified in question (3) will have to take to comply with this administrative regulation or amendment: The permit limits imposed on dischargers may result in additional or reduced treatment outlays, training costs, and operational changes.

(b) In complying with this administrative regulation or amendment, how much will it cost each of the entities identified in question (3): The costs to comply with this administrative regulation will vary considerably depending on the site location, the type of activity occurring, and other factors. All but 9 of the 233 proposed new Outstanding State Resource Waters (OSRWs) are identified as such because of excellent biological communities (fish or macroinvertebrates) as per existing regulatory framework in 401 KAR 10:030 that qualify them as Exceptional waters. The other 9 are OSRWs because they contain federally threatened or endangered species. Virtually all of these proposed new OSRWs are in less developed parts of the state with few existing entities that discharge into these waters. There is 1 revised criterion that applies to all 352 OSRWs, including the 233 new proposed OSRWs. That criterion is a slightly more stringent requirement for dissolved oxygen (6.0 mg/l versus the existing 5.0 mg/l). The purpose of the new standard is to provide additional protection to the biological community for a critical component (oxygen) of the stream environment. It is anticipated that costs associated with complying with this proposed requirement will be minimal, given that compliance with dissolved oxygen standards can be readily achieved with existing treatment technology. Other existing water quality requirements that may be imposed are anticipated to be the same for exiting discharges into these waters. The agency has existing regulatory authority to require more stringent requirements in specific cases if necessary to protect the quality of the OSRW.

(c) As a result of compliance, what benefits will accrue to the entities identified in question (3): Direct and indirect savings may be realized through reduced drinking water treatment costs, maintenance of good agricultural water, maintenance of fisheries, and healthy recreational waters.

(5) Provide an estimate of how much it will cost the administrative body to implement this administrative regulation:

(a) Initially: This amendment does not change routine procedures involved in managing construction grants, permitting, compliance monitoring, or enforcement. The cabinet does not anticipate additional costs.

(b) On a continuing basis: No major costs are anticipated. The cabinet, in implementing the requirements of this administrative regulation, will internalize associated costs with normal budget appropriations.

(6) What is the source of the funding to be used for the implementation and enforcement of this administrative regulation? The source of revenue will be General Fund, as appropriated by the Kentucky General Assembly, and federal funds. The existing budget for the Division of Water utilizes approximately \$800,000 in general funds and approximately \$240,000 in federal funds to implement this regulation.

(7) Provide an assessment of whether an increase in fees or funding will be necessary to implement this administrative regulation, if new, or by the change if it is an amendment: Fees or funding increases are not anticipated to be necessary to the implementation of this amendment.

(8) State whether or not this administrative regulation established any fees or directly or indirectly increased any fees: These amendments will not establish or increase fees.

(9) TIERING: Is tiering applied? Yes, tiering is applied in this administrative regulation. Any discharger into a water designated as cold water aquatic habitat will require dischargers into such water to meet requirements outlined in 401 KAR 10:031 that are more stringent than requirements for dischargers into surface water designated warm water aquatic habitat. Any discharger into a water designated as an outstanding resource water by this administrative regulation will also have special requirements as outlined in 401 KAR 10:031. Waters listed in Table B as having a surface water intake will have Domestic Water Supply criteria found in 401 KAR 10:031 Section 6.

#### FISCAL NOTE ON STATE OR LOCAL GOVERNMENT

1. Does this administrative regulation relate to any program, service, or requirements of a state or local government (including cities, counties, fire departments, or school districts)? Yes

2. What units, parts or divisions of state or local government (including cities, counties, fire departments, or school districts) will be impacted by this administrative regulation? This administrative regulation applies to designated uses to the surface waters of the Commonwealth. All governments that use the Commonwealth's surface waters for residential, commercial, industrial, or recreational purposes could be impacted by this regulation. This administrative regulation may affect the wastewater treatment operations of local governments if they will have discharges into surface waters of the Commonwealth that have been re-designated by this amended regulation.

3. Identify each state or federal statute or federal regulation that requires or authorizes the action taken by the administrative regulation. 40 C.F.R. 131, 16 U.S.C. 1271-1287, 1531-1544, 33 U.S.C. 1311, 1313, 1314, 1316, 1341

4. Estimate the effect of this administrative regulation on the expenditures and revenues of a state or local government agency (including cities, counties, fire departments, or school districts) for the first full year the administrative regulation is to be in effect.

(a) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for the first year? No new revenue will be generated.

(b) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for subsequent years? No new revenue will be generated.

(c) How much will it cost to administer this program for the first year? There will be no costs.

(d) How much will it cost to administer this program for subsequent years? There will be no cost.

Note: If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-):

Expenditures (+/-):

Other Explanation: This amended administrative regulation sets forth instream uses designated by the cabinet that in combination with criteria found in 401 KAR 10:031 provide for protection of water quality of the state's waters. Local governments will be required to discharge effluents which assure attainment of the receiving surface water's designated uses. The costs or savings of this amended administrative regulation would ordinarily be passed through to users; however, a local government that owns a public wastewater treatment system could elect to absorb some or all of the costs or savings. Criteria that apply to these re-designations found in this administrative regulation will be implemented at the time of permit issuance at existing facilities and new dischargers and expanded facilities will comply with the revisions. Local governments withdrawing drinking water from these waters may have lower treatment costs because these waters have lower pollutant loads. Additional costs may be incurred where criteria are more stringent than before or where new criteria are established, and less costs may be incurred where criteria are less stringent than previously or where criteria have been eliminated.

#### FEDERAL MANDATE ANALYSIS COMPARISON

1. Federal statute or regulation constituting the federal mandate. There is no federal statute or regulation mandating that Kentucky implement a water pollution control program. For Kentucky to maintain its delegation over the NPDES permit program, the Clean Water Act requires that Kentucky review its water quality standards every 3 years and comply with the programmatic requirements of 40 C.F.R. Part 131.

2. State compliance standards. 401 KAR 10:001, 10:026, 10:029, 10:030, and 10:031, the water quality standards regulations.

3. Minimum or uniform standards contained in the federal mandate. The Clean Water Act requires designated uses, criteria, standards and antidegradation policies in water quality standards.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements than those required by the federal mandate? No, federal regulation, 40 C.F.R. 131.10, requires states to take into consideration the value of public water supply, protection and propagation of fish, shellfish, and wildlife, and recreation in and on the water. Some higher quality waters (Outstanding State Resource Waters, or OSRW) require additional measures to protect that quality. Thus, Kentucky's structure of designated uses is not more stringent than federal. Most states have regulations similar to Kentucky's designated uses: aquatic life, human health for drinking water and consumption of fish tissue, recreation, and a category similar to our OSRW, and have had these uses approved by EPA. EPA is promoting and has published a guidance document on the concept of a tiered aquatic life use framework, which Kentucky is proposing by adding more excellent waters to the OSRW use.

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. There are no stricter standards or additional or different responsibilities or requirements. Please see the agency's response to question #4.



the 1990s, the number of people with a mental health problem has increased by 50% (Mental Health Foundation 1999). The prevalence of mental health problems has increased in the general population, and the incidence of mental health problems has increased in the prison population.

There is a growing awareness of the need to address the mental health needs of prisoners. The Department of Health (1999) has published a strategy for mental health services, which includes a commitment to improve the mental health of prisoners. The Department of Health (1999) has also published a strategy for mental health services, which includes a commitment to improve the mental health of prisoners.

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ENVIRONMENTAL AND PUBLIC PROTECTION CABINET  
 Department for Environmental Protection  
 Division of Water  
 (Amended After Comments)

**401 KAR 10:029. General provisions.**

RELATES TO: KRS 146.200-146.360, 146.410-146.535, 146.550-146.570, 146.600-146.619, 146.990, 224.01-010, 224.01-400, 224.16-050, 224.16-070, 224.70-100-224.70-140, 224.71-100-224.71-145, 224.73-100-224.73-120, 40 C.F.R. 136, 33 U.S.C. 1326(a), **EO 2008-507, 2008-531** [~~Part 136~~]

STATUTORY AUTHORITY: KRS 146.220, 146.241, 146.270, 146.410, 146.450, 146.460, 146.465, 224.10-100, 224.16-050, 224.16-060, 224.70-100, 224.70-110, 40 C.F.R. [~~Part~~] 131, 136, 16 U.S.C. 1531-1544 [~~et seq.~~], 33 U.S.C. 1311, 1312, 1313, 1314, 1316, 1341

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the [~~Environmental and Public Protection~~] cabinet to develop and conduct a comprehensive program for the management of water resources and to provide for the prevention, abatement, and control of water pollution. This administrative regulation and 401 KAR 10:001, 10:026, 10:030, and 10:031 [~~401 KAR 5:002, 401 KAR 5:026, 401 KAR 5:030, and 401 KAR 5:034~~] establish procedures to protect the surface waters of the commonwealth, and thus protect water resources. **EO 2008-507 and 2008-531, effective June 16, 2008, abolish the Environmental and Public Protection Cabinet and establish the new Energy and Environment Cabinet.** This administrative regulation establishes[.] the commonwealth's surface water antidegradation policy, provides[provide] for withdrawals of waters not meeting water quality standards, and addresses[address] sample collection and analytical methodology and[.] mixing zones[~~and variances for coal-mining operations~~].

Section 1. Antidegradation Policy. (1) The purpose of 401 KAR 10:026 through 401 KAR 10:031 [~~401 KAR 5:026 to 401 KAR 5:034~~] is to safeguard the surface waters of the commonwealth for their designated uses, to prevent the creation of [~~any~~] new pollution of these waters, and to abate [~~if applicable~~], [~~any~~] existing pollution.

(2) Where the quality of surface waters exceeds that necessary to support propagation of fish, shellfish, wildlife and recreation in and on the water, that quality shall be maintained and protected unless the cabinet finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the cabinet's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located.

(a) For point source discharges, water quality shall be maintained and protected in these waters according to the procedures specified in 401 KAR 10:030 [~~401 KAR 5:030~~], Section 1(2)(b) or (3)(b).

(b) In allowing degradation or lower water quality, the cabinet shall assure water quality adequate to protect existing uses fully.

(c) [~~Further,~~] The cabinet shall assure that there shall be achieved the highest statutory and regulatory requirements for waste treatment by all new and existing point sources and that nonpoint sources of pollutants be controlled by application of all cost effective and reasonable best management practices.

(3) Water quality shall be maintained and protected in a water categorized as an outstanding national resource water according to the procedures specified in 401 KAR 10:030 [~~401 KAR 5:030~~], Section 1(1)(b).

(4) Water quality shall be maintained and protected in those waters designated as outstanding state resource waters according to the procedures specified in 401 KAR 10:031 [~~401 KAR 5:034~~], Section 8.

(5) If potential water quality impairment associated with a thermal discharge is involved, a successful demonstration conducted under Section 316 of the Clean Water Act, 33 U.S.C. 1326, shall be in compliance with this section.

Section 2. Withdrawal of Contaminated Water. Surface waters occasionally do not meet [~~may, on occasion, not meet~~] the criteria established in 401 KAR 10:031 [~~401 KAR 5:034~~].

(1) Withdrawal and subsequent discharge of these waters without alteration of the physical or chemical characteristics into the same or similar surface water shall not be considered a violation of water quality standards.

(2) The cabinet shall determine KPDES permit limitations in these situations based on the quality of the raw and receiving waters.

(3) The cabinet retains the right to require permit modification under the provisions of 401 KAR 5:035, [~~401 KAR~~] 5:065, [~~401 KAR~~] 5:070, [~~401 KAR~~] 5:075, and [~~401 KAR~~] 5:080.

Section 3. Sample Collection and Analytical Methodology. (1) All methods of preservation and analysis used to determine conformity or nonconformity with water quality standards shall be governed by 40 C.F.R. ~~[Part]~~ 136, as amended, if applicable.

(2) Sample collection and other methods not established in subsection (1) of this section ~~[found in the above reference]~~ may be used as ~~[where]~~ appropriate if they:

- (a) ~~[(4)]~~ Meet commonly accepted quality assurance and quality control principles;
- (b) ~~[(2)]~~ Are within the accuracy required for determining conformity or nonconformity with water quality standards; and
- (c) ~~[(3)]~~ Receive prior written approval by the cabinet.

Section 4. Mixing Zones. The following requirements shall apply to a mixing zone:

(1) ~~[Upon request by the applicant for mixing zones for nonconventional pollutants]~~ The cabinet may ~~[shall]~~ ~~[may]~~ assign definable geometric limits for mixing zones for a discharge ~~of~~ ~~[or]~~ a pollutant or pollutants within a discharge ~~based on the following criteria: [-]~~

(a) Applicable limits shall include the linear distances from the point of discharge, surface area involvement, volume of receiving water, and shall take into account other nearby mixing zones; [-]

(b) Dilution provided by assigned mixing zones shall not be allowed until applicable limits are assigned by the cabinet in accordance with this section;

(c) In a stream or river, unless assigned on or before December 8, 1999, an assigned mixing zone, from the point of discharge in a spatial direction, shall not exceed one-third (1/3) of the width of the receiving stream or one-half (1/2) of the cross-sectional area;

(d) In a lake or a reservoir, unless assigned on or before December 8, 1999, an assigned mixing zone, from the point of discharge in any spatial direction, shall not exceed one-tenth (1/10) of the width of the lake, or reservoir at the discharge point;

(e) An assigned mixing zone shall be limited to an area or volume that shall not adversely affect the designated uses of the receiving water and shall not be so large as to adversely affect an established community of aquatic organisms;

(f) The location of a mixing zone shall not:

1. Interfere with fish spawning or nursery areas, fish migration routes, public water supply intakes, or bathing areas;

2. Preclude the free passage of fish or other aquatic life; or

3. Jeopardize the continued existence of endangered or threatened aquatic species listed under Section 4 of the Endangered Species Act, 16 U.S.C. 1531 through 1544, or result in the destruction or adverse modification of their critical habitat;

(g) For thermal discharges, a successful demonstration conducted under Section 316(a) of the Clean Water Act, 33 U.S.C. Section 1326(a), shall constitute compliance with this section; and

(h) Unless assigned by the cabinet on or before September 8, 2004, there shall not be mixing zones for bioaccumulative chemicals of concern.

1. A mixing zone that was assigned by the cabinet for a bioaccumulative chemical of concern shall not expire later than September 8, 2014.

2.a. A bioaccumulative chemical of concern is one that accumulates in one (1) or more aquatic organisms by a human health bioaccumulation factor of greater than 1,000.

b. For the purposes of this administrative regulation, bioaccumulative chemicals of concern shall consist of the following:

- (i) alpha-Hexachlorocyclohexane;
- (ii) beta-Hexachlorocyclohexane;
- (iii) Chlordane;
- (iv) DDD;
- (v) DDE;
- (vi) DDT;
- (vii) delta-Hexachlorocyclohexane;
- (viii) Dieldrin;
- (ix) Hexachlorobenzene;
- (x) Hexachlorobutadiene;
- (xi) Hexachlorocyclohexane;
- (xii) Lindane;
- (xiii) Mercury;
- (xiv) Mirex;

September 8, 2014][ten (10) years from the effective date of this administrative regulation][:

~~(b)1. A bioaccumulative chemical of concern is one that accumulates in one (1) or more aquatic organisms by a human health bioaccumulation factor of greater than 1000.~~

~~2. For the purposes of this administrative regulation, bioaccumulative chemicals of concern shall consist of the following:~~

~~a.][(a)][alpha-Hexachlorocyclohexane;~~

~~b.][(b)][beta-Hexachlorocyclohexane;~~

~~c.][(c)][Chlordane;~~

~~d.][(d)][DDD;~~

~~e.][(e)][DDE;~~

~~f.][(f)][DDT;~~

~~g.][(g)][delta-Hexachlorocyclohexane;~~

~~h.][(h)][Dieldrin;~~

~~i.][(i)][Hexachlorobenzene;~~

~~j.][(j)][Hexachlorobutadiene;~~

~~k.][(k)][Hexachlorocyclohexane;~~

~~l.][(l)][Lindane;~~

~~m.][(m)][Mercury;~~

~~n.][(n)][Mirex;~~

~~o.][(o)][Octachlorostyrene;~~

~~p.][(p)][PCBs;~~

~~q.][(q)][Pentachlorobenzene;~~

~~r.][(r)][Photomirex;~~

~~s.][(s)][Toxaphene;~~

~~t.][(t)][1,2,3,4-Tetrachlorobenzene;~~

~~u.][(u)][1,2,4,5-Tetrachlorobenzene; and~~

~~v.][(v)][2,3,7,8-TCDD (Dioxin).]~~

~~[Section 5. Water Quality based Variance for Coal Remining Operations. (1) Applicability. An applicant for a Kentucky pollutant discharge elimination system (KPDES) permit to discharge pollutants from or affected by a coal remining operation may request a variance from the water quality criteria for pH, iron and manganese set forth in 401 KAR 5:031.~~

~~(2) Application requirements.~~

~~(a) The applicant shall comply with all KPDES permit application requirements, as set forth in 401 KAR 5:060.~~

~~(b) The applicant shall submit documentation from the Department for Surface Mining Reclamation and Enforcement (DSMRE) certifying that the proposed coal remining operation will be located on a mined area.~~

~~(c) The applicant shall:~~

~~1. Describe the hydrologic balance for the proposed coal remining operation, including:~~

~~a. Results of a detailed water quality and quantity monitoring program, including seasonal variations, variations in response to precipitation events, and modeled baseline pollution loads using the monitoring program; and~~

~~b. Monitoring for pH, alkalinity, acidity, total iron, total manganese, sulfates, total suspended solids, and any other water quality parameters requested by the cabinet;~~

~~2. Submit the application for a permit from DSMRE;~~

~~3. Submit, if not submitted in the application for a permit from DSMRE:~~

~~a. Plans, cross sections, and schematic drawings describing the techniques for reducing the discharge of acid-forming materials, iron and manganese;~~

~~b. A description and an explanation of the range of abatement levels that probably can be achieved, costs, and each step proposed to reduce the discharge of acid forming materials, iron and manganese;~~

~~c. A description of the spoil handling practices necessary to reduce the discharge of acid-forming materials, iron and manganese; and~~

~~d. A detailed topographic map of the proposed coal remining operation, including the locations of the preexisting and proposed discharges;~~

~~and~~

- (xv) Octachlorostyrene;
- (xvi) PCBs;
- (xvii) Pentachlorobenzene;
- (xviii) Photomirex;
- (xix) Toxaphene;
- (xx) 1,2,3,4-Tetrachlorobenzene;
- (xxi) 1,2,4,5-Tetrachlorobenzene; and
- (xxii) 2,3,7,8-TCDD (Dioxin).

(2) Concentrations of toxic substances that exceed the acute criteria for protection of aquatic life in 401 KAR 10:031~~[401 KAR 5:034]~~ shall not exist within an assigned mixing zone or in the discharge itself unless a zone of initial dilution is assigned.

(a) A zone of initial dilution shall~~may~~ be assigned pursuant to subsection (3) of this section.

(b) Chronic criteria for the protection of aquatic life and criteria for the protection of human health from the consumption of fish tissue shall be met at the edge of the assigned mixing zone.

(3) The following requirements shall apply to a zone of initial dilution:

(a) The cabinet shall require an applicant to provide a technical evaluation for a zone of initial dilution;

(b) Concentrations of toxic substances shall not exceed the acute criteria for the protection of aquatic life at the edge of the assigned zone of initial dilution, except, numeric acute criteria may be exceeded within the zone if the frequency and duration of exposure of aquatic organisms are not sufficient to cause acute toxicity; and

(c) Unless assigned on or before December 8, 1999 ~~[the effective date of this administrative regulation]~~, a zone of initial dilution for a pollutant shall not be allowed in an exceptional water.

(4) Unless assigned on or before the most recent effective date of this administrative regulation, a zone of initial dilution for a pollutant shall be available only to a submerged high-rate multiport outfall structure ~~with a velocity greater than or equal to three (3) meters per second~~ and shall be limited in size to the most restrictive of the following:

(a) The acute criteria shall be met within ten (10) percent of the distance from the edge of the outfall structure to the edge of the regulatory mixing zone in a spatial direction;

(b) The acute criteria shall be met within a distance of fifty (50) times the square root of the cross-sectional area of a discharge port, in a spatial direction; or

(c) The acute criteria shall be met in a horizontal direction within a distance of five (5) times the natural water depth that prevails under mixing zone design conditions, and exists before the installation of a discharge outlet.

~~[(d) Residence times within the zone of initial dilution for drifting organisms shall not exceed fifteen (15) minutes.]~~

~~(5) The location of a mixing zone shall not:~~

~~(a) Interfere with fish spawning or nursery areas, fish migration routes, public water supply intakes, or bathing areas;~~

~~(b) Preclude the free passage of fish or other aquatic life; or~~~~[(and)]~~

~~[(c) Jeopardize the continued existence of][any][endangered or threatened aquatic species listed under Section 4 of the Federal Endangered Species Act, 16 U.S.C. 1531 through 1544][et seq.], or result in the destruction or adverse modification of their critical habitat.~~

~~(d) Result in a residence time within the mixing zone for drifting organisms of greater than one (1) hour.~~

~~(6) Unless assigned on or before December 8, 1999] [the effective date of this administrative regulation], an assigned mixing zone, from the point of discharge in a spatial direction, shall not exceed one third (1/3) of the width of the receiving stream or one half (1/2) of the cross-sectional area.~~

~~(7) In a lake or a reservoir, unless assigned on or before December 8, 1999][the effective date of this administrative regulation], an assigned mixing zone, from the point of discharge in any spatial direction, shall not exceed one-tenth (1/10) of the width of the lake, or reservoir at the discharge point.~~

~~(8) An assigned mixing zone shall be limited to an area or volume which will not adversely affect the designated uses of the receiving water[,] and shall not be so large as to adversely affect an established community of aquatic organisms.~~

~~(9) For thermal discharges, a successful demonstration conducted under Section 316(a) of the Clean Water Act, 33 U.S.C. 1326(a), shall constitute compliance with this section.~~

~~(10) Unless assigned by the cabinet on or before September 8, 2004][the effective date of this administrative regulation], there shall not be mixing zones for bioaccumulative chemicals of concern.~~

~~(a) A][Any][mixing zone that was assigned by the cabinet for a bioaccumulative chemical of concern shall not expire][no][later than~~

4. Continue the water quality and quantity monitoring program described in subparagraph 1 of this paragraph, and submit the results to the cabinet on a periodic basis until the cabinet makes a final permit decision. The cabinet shall evaluate the KPDES monitoring program and the DSMRE monitoring program for each applicant to avoid duplication and inconsistencies.

(d) An applicant with an existing surface coal mining operation seeking a permit revision from DSMRE pursuant to 405 KAR 8:010, Section 20 shall also demonstrate to the satisfaction of the cabinet that:

1. The applicant discovered discharges within the proposed coal remining area after the applicant's DSMRE permit was issued; and
2. The applicant has not caused or contributed to the discharges.

(2) Treatment requirements. If the cabinet issues a KPDES permit to discharge pollutants from or affected by a coal remining operation containing the variance described in subsection (1) of this section, the water quality-based effluent limitations for pH, iron and manganese shall be established on a case-by-case basis. Compliance with these effluent limitations constitutes compliance with these water quality criteria for pH, iron and manganese set forth in 401 KAR 5:031.

(4) Prohibitions. In addition to the prohibitions contained in 401 KAR 5:055, the following prohibitions apply to this section:

(a) A KPDES permit containing the water quality-based variance of subsection (1) of this section shall not be issued unless the coal remining operation has applied for a permit from the Department for Surface Mining Reclamation and Enforcement, as set forth in 405 KAR Chapters 7 through 24, inclusive. The effective date of the KPDES permit shall not be sooner than the effective date of the permit issued by the Department for Surface Mining Reclamation and Enforcement.

(b) A KPDES permit containing the water quality-based variance of subsection (1) of this section shall not be issued for a surface coal mining operation which is not a coal remining operation located on a remined area.

(c) A KPDES permit containing the water quality-based variance of subsection (1) of this section shall not be issued which would allow the discharges of acid-forming materials, iron or manganese to exceed the levels being discharged from the remined area before the coal remining operation begins.

(d) A KPDES permit containing the water quality-based variance of subsection (1) of this section shall not be issued if the applicant fails to demonstrate to the satisfaction of the cabinet that the coal remining operation will result in the potential for improved water quality from the remining operation over that existing prior to the remining operation, and that the information provided in the application is adequate for the cabinet to make an informed final permit decision.

(e) A KPDES permit containing the water quality-based variance of subsection (1) of this section shall not be issued with effluent limitations less stringent than applicable technology-based effluent limitations established in 401 KAR 5:065 or 401 KAR 5:080.

(f) In addition to the prohibitions of paragraphs (a) through (e) of this subsection, a KPDES permit containing the water quality-based variance of subsection (1) of this section shall not be issued for an existing surface coal mining operation unless:

1. The applicant receives a permit revision from DSMRE in accordance with 405 KAR 8:010, Section 20;
2. The applicant discovered discharges within the proposed coal remining area after the applicant's DSMRE permit was issued; and
3. The applicant has not caused or contributed to the discharges since August 3, 1977.

Section 6. Federal Regulation Adopted Without Change. (1) The following federal regulation governs the subject matter of this administrative regulation and is adopted without change: 40 C.F.R. Part 136 Guidelines Establishing Test Procedures for the Analysis of Pollutants, July 1, 2002, U.S. Environmental Protection Agency, U.S. Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, D. C. 20402-9328.

(2) This federal regulation may be inspected, copied, or obtained, subject to applicable copyright law, at the Division of Water, 14 Reilly Road, Frankfort, Kentucky, Monday through Friday, 8 a.m. to 4:30 p.m.]

LEONARD K. PETERS, Secretary

APPROVED BY AGENCY: September 11, 2008

FILED WITH LRC: September 12, 2008 at noon

CONTACT PERSON: Abigail Powell, Regulations Coordinator, Division of Water, 14 Reilly Road, Frankfort, Kentucky 40601, phone (502) 564-3410, fax (502) 564-0111, email Abigail.Powell@ky.gov.

#### REGULATORY IMPACT ANALYSIS AND TIERING STATEMENT

Contact Person: Sandy Gruzsky

(1) Provide a brief summary of:

(a) What this administrative regulation does: This administrative regulation provides general provisions under which water quality regulations operate to protect the surface waters of the Commonwealth. This administrative regulation provides for withdrawal of contaminated water, sample collection and methodology, and mixing zones. This administrative regulation is also used in conjunction with 401 KAR 10:030 to implement antidegradation requirements. The purpose of this administrative regulation is to address the issues for water quality protection not covered in 10:026, 10:030, or 10:031. This administrative regulation is used in conjunction with those administrative regulations to form a complete protection program.

(b) The necessity of this administrative regulation: This administrative regulation is necessary to establish requirements for the protection of the surface waters of the Commonwealth.

(c) How this administrative regulation conforms to the content of the authorizing statutes: This administrative regulation conforms to KRS 224.10-100, which requires the cabinet to develop and conduct a comprehensive program for the management of water resources and to provide for the prevention, abatement, and control of water pollution. This administrative regulation and 401 KAR 10:026, 10:030, and 10:031 establish procedures to protect the surface waters of the Commonwealth, and thus manage water resources and prevent water pollution. This administrative regulation establishes the Commonwealth's surface water antidegradation policy (in conjunction with 401 KAR 10:030), provides for withdrawals of waters not meeting water quality standards, addresses sample collection and analytical methodology, requires the elimination of mixing zones for existing discharges of bioaccumulative chemicals of concern by September 2014, and does not allow new mixing zones for bioaccumulative chemicals of concern.

(d) How this administrative regulation currently assists or will assist in the effective administration of the statutes: This administrative regulation will assist in the administration of the statutes by providing specific requirements for the protection of surface waters of the Commonwealth as required by the authorizing statutes.

(2) If this is an amendment to an existing administrative regulation, provide a brief summary of:

(a) How the amendment will change this existing administrative regulation: This amendment clarifies that, upon request by an applicant, the cabinet shall assign mixing zones and consider the geometric limits of such mixing zones.

(b) The necessity of the amendment to this administrative regulation: This amendment is necessary to establish revised measures to protect human health and aquatic life. For Kentucky to maintain its delegation over the NPDES permit program, the Clean Water Act requires that Kentucky review its water quality standards every three years and comply with the programmatic requirements of 40 C.F.R. Part 131. This administrative regulation is being amended as part of the triennial review.

(c) How the amendment conforms to the content of the authorizing statutes: This amendment conforms to KRS 224.10-100, which requires the cabinet to develop and conduct a comprehensive program for the management of water resources and to provide for the prevention, abatement, and control of water pollution. This amendment and 401 KAR 10:026, 10:030, and 10:031 establish procedures to protect the surface waters of the Commonwealth, and thus protect water resources. This amendment establishes the Commonwealth's surface water antidegradation policy, provides for withdrawals of waters not meeting water quality standards, and address sample collection and analytical methodology, and mixing zones.

(d) How the amendment will assist in the effective administration of the statutes: This amendment will assist in the effective administration of the statutes by prohibiting discharges that would endanger human health, wildlife, or habitat.

(3) List the type and number of individuals, businesses, organizations, or state and local governments affected by this administrative regulation: This administrative regulation provides general provisions applicable to municipalities, campgrounds, subdivisions, businesses, marinas, residences, and government agencies with permitted discharges into surface waters of the Commonwealth.

(4) Provide an analysis of how the entities identified in question (3) will be impacted by either the implementation of this administrative regulation, if new, or by the change, if it is an amendment, including:

(a) List the actions that each of the regulated entities identified in question (3) will have to take to comply with this administrative regulation or amendment: Entities identified in questions (3) will have to: meet water quality standards, addresses sample collection, establish analytical methodologies, eliminate mixing zones for existing discharges of bioaccumulative chemicals of concern by September 2014, and not allow new mixing zones for bioaccumulative chemicals of concern.

(b) In complying with this administrative regulation or amendment, how much will it cost each of the entities identified in question (3): Compliance with revisions to this administrative regulation will not result in costs to regulated entities.

(c) As a result of compliance, what benefits will accrue to the entities identified in question (3): Maintaining existing water quality may have a positive influence on revenues derived from water-based tourism and can result in good quality water for drinking water supplies.

(5) Provide an estimate of how much it will cost the administrative body to implement this administrative regulation:



(a) Initially: This amendment does not change routine procedures involved in managing construction grants, permitting, compliance monitoring, or enforcement. Implementation costs should remain relatively constant.

(b) On a continuing basis: No major costs are anticipated. The cabinet, in implementing the requirements of this amended administrative regulation, will internalize associated costs with normal budget appropriations.

(6) What is the source of the funding to be used for the implementation and enforcement of this administrative regulation? The source of revenue will be the General Fund and federal funds, as appropriated by the Kentucky General Assembly. The existing budget for the Division of Water utilizes approximately \$800,000 in general funds and approximately \$240,000 in federal funds to implement this regulation. There are no initial costs to implement this regulation.

(7) Provide an assessment of whether an increase in fees or funding will be necessary to implement this administrative regulation, if new, or by the change if it is an amendment: Fees or funding increases are not anticipated to be necessary to the implementation of this amendment.

(8) State whether or not this administrative regulation established any fees or directly or indirectly increased any fees: This administrative regulation does not establish any fees nor directly or indirectly increase any fees.

(9) TIERING: Is tiering applied? Yes, tiering is applied in this administrative regulation. Dischargers with mixing zones and zones of initial dilution must comply with 401 KAR 10:029, Section 4. Dischargers with mixing zones must comply with the Endangered Species Act and must limit discharges of bioaccumulative chemicals of concern in mixing zones. Dischargers with zones of initial dilution must meet specific criteria specified in Section 4 of this administrative regulation.

#### FISCAL NOTE ON STATE OR LOCAL GOVERNMENT

1. Does this administrative regulation relate to any program, service, or requirements of a state or local government (including cities, counties, fire departments, or school districts)? Yes

2. What units, parts or divisions of state or local government (including cities, counties, fire departments, or school districts) will be impacted by this administrative regulation? This administrative regulation may affect the wastewater treatment operations of local government if they will have new or expanded discharges into surface waters of the Commonwealth.

3. Identify each state or federal statute or federal regulation that requires or authorizes the action taken by the administrative regulation. This amended administrative regulation relates to local governments' wastewater treatment service. KRS 224.10-100, 224.70-100, and 224.70-110 mandate action taken by this administrative regulation.

4. Estimate the effect of this administrative regulation on the expenditures and revenues of a state or local government agency (including cities, counties, fire departments, or school districts) for the first full year the administrative regulation is to be in effect.

(a) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for the first year? This regulation will not generate any revenue.

(b) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for subsequent years? This regulation will not generate any revenue.

(c) How much will it cost to administer this program for the first year? There will be no cost to state or local agencies to implement this regulation.

(d) How much will it cost to administer this program for subsequent years? There will be no cost to state or local agencies to implement this regulation.

Note: If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-): Cannot be determined

Expenditures (+/-): Cannot be determined

Other Explanation: Wastewater treatment costs may increase for those local governments that will have new or expanded discharges into streams, rivers, and publicly owned lakes and reservoirs. On the other hand, local governments withdrawing drinking water from these waters may have lower treatment costs because these waters should have lower pollutant loads.

#### FEDERAL MANDATE ANALYSIS COMPARISON

1. Federal statute or regulation constituting the federal mandate. There is no federal statute or regulation mandating that Kentucky

implement a water pollution control program. For Kentucky to maintain its delegation over the NPDES permit program, the Clean Water Act requires that Kentucky review its water quality standards every three years and comply with the programmatic requirements of 40 C.F.R. Part 131, including the antidegradation policy.

2. State compliance standards. 401 KAR 10:001, 10:026, 10:029, 10:030, and 10:031, the water quality standards regulations.

3. Minimum or uniform standards contained in the federal mandate. The Clean Water Act requires designated uses, criteria, standards and antidegradation policies in water quality standards.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements than those required by the federal mandate? No

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. There are no stricter standards or additional or different responsibilities or requirements.

The first part of the paper discusses the importance of understanding the local context in which a project is implemented. This includes a thorough understanding of the community's needs, values, and beliefs. It is essential to engage with the community from the very beginning, ensuring that their voices are heard and their input is valued. This process of community engagement is not a one-time event but a continuous process that evolves as the project progresses.

The second part of the paper explores the challenges of implementing a project in a resource-poor environment. Limited financial resources, lack of infrastructure, and limited access to services can all pose significant barriers to success. However, these challenges can be overcome through creative problem-solving and the use of local resources. For example, involving local people in the project can help to reduce costs and ensure that the project is more sustainable in the long run.

The third part of the paper discusses the importance of monitoring and evaluation. This involves setting clear objectives and indicators at the start of the project and then regularly measuring progress against these. This allows the project team to identify any problems early on and make adjustments as needed. It also provides a way to demonstrate the impact of the project to stakeholders and funders.

The final part of the paper discusses the importance of sustainability. A project should be designed in such a way that it can continue to benefit the community even after the project team has left. This can be achieved through the transfer of skills and knowledge to local people, the establishment of local organizations, and the development of a business plan that can generate income to cover the costs of the project.



ENVIRONMENTAL AND PUBLIC PROTECTION CABINET  
Department for Environmental Protection  
Division of Water  
(Amended After Comments)

**401 KAR 10:030. Antidegradation policy implementation methodology.**

RELATES TO: KRS 146.200-146.360, 146.410-146.535, 146.550-146.570, 146.600-146.619, 146.990, 224.01-010, 224.01-400, 224.16-050, 224.16-070, 224.70-100-224.70-140, 224.71-100-224.71-145, 224.73-100-224.73-120, 30 U.S.C. 1201 - 1328, EO 2008-507, 2008-531

STATUTORY AUTHORITY: KRS 146.220, 146.241, 146.270, 146.410, 146.450, 146.460, 146.465, 224.10-100, 224.16-050, 224.16-060, 224.70-100, 224.70-110, 40 C.F.R. ~~[Parts]~~ 130, 131, 16 U.S.C. 1271-~~1287~~ ~~[et seq.]~~, 1531-~~1544~~ ~~[et seq.]~~, 33 U.S.C. 1311, 1313, 1314, 1315, 1316, 1341, 1342, 1344

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the ~~[Environmental and Public Protection]~~ cabinet to develop and conduct a comprehensive program for the management of water resources and to provide for the prevention, abatement, and control of all water pollution. KRS 224.70-100 declares that the policy of the commonwealth is to conserve its waters for legitimate uses, ~~[and to]~~ safeguard from pollution the uncontaminated waters of the commonwealth, prevent the creation of any new pollution in the waters of the commonwealth, and abate any existing pollution. EO 2008-507 and 2008-531, effective June 16, 2008, abolish the Environmental and Public Protection Cabinet and establish the new Energy and Environment Cabinet. This administrative regulation and 401 KAR 10:001, 10:026, 10:029, and 10:031~~[401 KAR 5:002, 5:026, 5:029, and 5:034]~~ establish procedures to protect the surface waters of the commonwealth, and thus protect water resources. This administrative regulation establishes a methodology to implement the antidegradation policy contained in 401 KAR 10:029~~[401 KAR 5:029]~~ by establishing procedures to control water pollution in waters affected by that policy.

Section 1. Categorization and Implementation. A flow chart outlining the procedures is incorporated by reference for informational purposes in this administrative regulation. These antidegradation procedures shall not preempt the power or authority of a local government to provide by ordinance for a higher level of protection through antidegradation implementation for a discharger located within that local government's jurisdiction to a surface water of the commonwealth. The following procedures shall govern implementation of the antidegradation policy of 401 KAR 10:029~~[401 KAR 5:029]~~, Section 1, for a point source discharge. ~~[A flow chart outlining the procedures is incorporated by reference for informational purposes in Section 3 of this administrative regulation. These antidegradation procedures shall not preempt the power or authority of a local government to provide by ordinance for a higher level of protection through antidegradation implementation for a discharger located within that local government's jurisdiction to a surface water of the commonwealth.]~~ Surface waters shall be placed into one (1) of four (4) categories listed in this section and each category shall have implementation procedures as follows:

(1) Outstanding national resource water. Surface waters of the commonwealth categorized as outstanding national resource waters are listed in Table 1 of this subsection.

Table 1 SURFACE WATERS CATEGORIZED AS OUTSTANDING NATIONAL RESOURCE WATER			
Stream	Segment	River Miles	County
Red River	Upstream to Island off SR 1067 to Downstream Wild River Boundary at SR 746	49.2 to <del>[-]</del> 68.6	Menifee/Wolfe
Underground River System	Within Mammoth Cave National Park Boundary		Edmonson/Hart/Barren
<del>[Big]</del> South Fork of Cumberland River	Downstream Wild River Boundary to Tennessee <del>State line</del> <del>[Stateline]</del>	44.3 to 54.8 <del>[45.0-55.2]</del>	McCreary
Surface Waters within Reelfoot Lake National Wildlife Refuge	Reelfoot Lake National Wildlife Refuge Proclamation Boundary in Kentucky	2040 Acres	Fulton
War Fork of Station Camp Creek	Basin above South Fork of Station Camp Creek to Steer Fork	0.0 to 13.8	Jackson
Marsh Creek	Mouth to 1.9 miles upstream of Kentucky	0.0 to 15.0	McCreary

	478		
Rock Creek	State border to White Oak Creek	4.1 to 21.9	McCreary
Rockcastle River	Lower end of Narrows to 0.2 miles downstream of Kentucky 80 bridge	8.95 to 22.4 <del>[8.5 to 21.8]</del>	Laurel/Pulaski

(a) Categorization criteria. A surface water shall be categorized as an outstanding national resource water if:

1. The surface water meets, at a minimum, the requirements for an outstanding state resource water as provided in 401 KAR 10:031~~[401 KAR 5:031]~~, Section 8;~~[-]~~ and

2. ~~[#]~~ The surface water demonstrates national ecological or recreational significance.

(b) Implementation procedure.

1. Water quality shall be maintained and protected in outstanding national resource water.

2. A new discharger or expanded discharge ~~that~~~~[which]~~ may result in permanent or long-term changes in water quality shall be~~is~~ prohibited.

3. The cabinet may approve temporary or short-term changes in water quality if the changes to the outstanding national resource water do not have a~~[ne]~~ demonstrable impact on the ability of the water to support the designated uses.

(2) Exceptional water. Surface waters of the commonwealth categorized as exceptional water are listed in Table 2 of this subsection.

Table 2 SURFACE WATERS CATEGORIZED AS EXCEPTIONAL WATER			
Stream	Segment	River Miles	County
<b>BIG SANDY RIVER BASIN</b>			
Hobbs Fork of Pigeonroost Fork of Wolf Creek*	Mouth to Headwaters	0.0-3.9	Martin
Lower Pigeon Branch of Elkhorn Creek*	Left Fork to Headwaters	0.6-1.9	Pike
Russell Fork of Levisa Fork of Big Sandy River*	Clinch Field RR Yard off HWY 80 to Virginia State Line	15.0-16.5	Pike
Toms Branch of Elkhorn Creek*	Mouth to Headwaters	0.0-1.6	Pike
Unidentified Tributary of Hobbs Fork*	Hobbs Fork of Pigeonroost Fork to Headwaters	0.0-0.6	Martin
<b>LITTLE SANDY RIVER BASIN</b>			
Arabs Fork of Big Sinking Creek*	Clay Fork to Headwaters	0.0-5.1	Elliott
Big Caney Creek*	Grayson Lake to Headwaters	1.8-15.3	Elliott, Rowan
Big Sinking Creek of Little Sandy River*	SR 986 to Clay Fork and Arab Fork	6.1-15.8	Carter, Elliott
Meadow Branch of Little Fork of Little Sandy River*	Mouth to Headwaters	0.0-1.4	Elliott
Middle Fork of Little Sandy River*	Mouth to Sheepskin Branch	0.0-3.4	Elliott
Nichols Fork of Little Fork of Little Sandy River*	Green Branch to Headwaters	0.0-2.0	Elliott
Laurel Creek of Little Sandy	Carter School Rd Bridge to Headwaters	7.6-14.7	Elliott, Rowan

River*			
LICKING RIVER BASIN			
Blackwater Creek of Licking River*	Eaton Creek to Greasy Fork	3.8-11.7	Morgan
Blanket Creek of Licking River	Mouth to Unidentified Tributary	0.0-1.9	Pendleton
Botts Fork of Brushy Fork of Licking River*	Mouth to Landuse Change	0.0-2.1	Menifee
Bowman Creek of Licking River	Mouth to Unidentified Tributary	0.0-6.0	Kenton
Brushy Fork of Meyers Creek*	Cave Run Lake Backwaters to Headwaters	0.7-5.6	Menifee
Brushy Fork of South Fork of Grassy Creek*	Mouth to Headwaters	0.0-5.8	Pendleton
Bucket Branch of North Fork of Licking River*	Mouth to Headwaters	0.0-1.9	Morgan
Cedar Creek of Licking River	Mouth to North Branch of Cedar Creek	0.0-1.7	Robertson
Craney Creek of Licking River	Mouth to Headwaters	0.0-11.2	Morgan, Rowan
Devils Fork of North Fork of Licking River*	Mouth to Headwaters	0.0-8.5	Elliott, Morgan
Flour Creek of Licking River	Mouth to Unidentified Tributary	0.0-2.2	Pendleton
Grovers Creek of Kincaid Creek*	Kincaid Lake Backwaters to Unidentified Tributary	0.5-3.4	Bracken, Pendleton
Licking River	SR 211 to unnamed Rd off Slatey Point Rd	159.5-170.6	Bath, Rowan
North Fork of Licking River*	Cave Run Lake Backwaters to Devils Fork	8.4-13.4	Morgan
Sawyers Fork of Cruises Creek	Mouth to Headwaters	0.0-3.3	Kenton
Slabcamp Creek of Craney Creek of Licking River	Mouth to Headwaters	0.0-3.7	Rowan
Slate Creek of Licking River	Mouth to Mill Creek	0.0-13.6	Bath
South Fork Grassy Creek of Grassy Creek of Licking River*	Mouth to Greasy Creek	0.0-19.8	Kenton, Pendleton
Unidentified Tributary of Shannon Creek of North Fork of Licking River	Mouth to Headwaters	0.0-2.2	Mason
Welch Fork of Brushy Fork of Licking River*	Mouth to First Road Crossing	0.0-1.0	Menifee

West Creek of Licking River*	Mouth to Headwaters	0.0-9.8	Harrison, Robertson
KENTUCKY RIVER BASIN			
Backbone Creek of Sixmile Creek of Kentucky River*	Mouth to Scrabble Creek	0.0-1.65 <del>{0.0-4.7}</del>	Franklin, Henry, Shelby
Bear Branch of North Fork of Kentucky River	Above Sediment Pond to Headwaters	0.3-1.2	Perry
Big Double Creek of Red Bird River*	Mouth to confluence of Left and Right Forks of Big Double Creek	0.0-6.5	Clay
Bill Branch of Laurel Fork of Greasy Creek*	Mouth to Right Fork and Left Fork Creek	0.0-0.3	Leslie
Billey Fork of Millers Creek	Land Use Change to Headwaters	2.6-8.8	Lee, Elliott
Bill Oak Branch of Left Fork of Buffalo Creek	Mouth to Headwaters	0.0-0.6	Owsley
Buffalo Creek of South Fork of Kentucky River*	Mouth to Right Fork and Left Fork	0.0-1.6	Owsley
Cavanaugh Creek*	South Fork of Station Camp Creek to Foxtown Rd	[0.0-8.3] <del>0.0-5.1</del>	Jackson
Cherry Run of Boyd Run of North Elkhorn Creek	Mouth to Boyd Run	0.0-0.9	Scott
Chester Creek of Middle Fork of Red River*	Mouth to Headwaters	0.0-2.8	Wolfe
Clear Creek of Kentucky River*	Mouth to East Fork Clear Creek	0.0-9.0	Woodford
Clemons Fork of Buckhorn Creek*	Mouth to Headwaters	0.0-4.8	Breathitt
Coles Fork of Buckhorn Creek*	Mouth to Headwaters	0.0-6.2	Breathitt
Craig Creek of Kentucky River*	Mouth to Unidentified Tributary	0.5-2.7	Woodford
Deep Ford Branch of Cutshin Creek	Above Pond to Headwaters	0.3-1.3	Leslie
Drennon Creek of Kentucky River*	Fivemile Creek to Town Branch	8.7-12.2	Henry
East Fork of Indian Creek of Indian Creek of Red River*	West Fork of Indian Creek to Headwaters	0.0-9.0	Menifee
Elisha Creek of Red Bird River*	Land Use Change (Residential) to the confluence of Right Fork and Middle Fork	0.8-1.8	Leslie



	<u>Elisha Creek</u>		
<u>Emily Run of Drennon Creek</u>	Mouth to Unidentified Tributary	0.0-4.0	Henry
<u>Evans Fork of Billey Fork of Millers Creek</u> *	Mouth to Headwaters	0.0-3.0	Estill
<u>Falling Rock Branch of Clemons Fork of Buckhorn Creek</u> *	Mouth to Headwaters	0.0-0.7	Breathitt
<u>Gilberts Creek of Kentucky River</u>	Mouth to Unidentified Tributary	0.0 to 2.6	Anderson
<u>Gladie Creek of Red River</u> *	Land Use Change to Long Branch	0.35 to 7.3	Menifee
<u>Goose Creek of South Fork of Kentucky River</u>	Mouth to Laurel Creek	0.0-9.1	Clay, Leslie
<u>Griers Creek of Kentucky River</u> *	Kentucky River Backwaters to Unidentified Tributary	0.1 to 3.5	Woodford
<u>Grindstone Creek of Kentucky River</u> *	Kentucky River Backwaters to Headwaters	0.1 to 1.9	Franklin
<u>Hardwick Creek of Red River</u>	Mouth to Little Hardwick Creek	0.0-3.25	Powell
<u>Hell For Certain of Middle Fork of Red River</u>	Mouth to Big Fork	0.0-2.1	Leslie
<u>Hines Creek of Kentucky River</u> *	Kentucky River Backwaters to confluence with Unidentified Tributary	0.1 to 1.9	Madison
<u>Honey Branch of Greasy Creek of Middle Fork of Kentucky River</u> *	Mouth to Headwaters	0.0-1.35	Leslie
<u>Hopper Cave Branch of Cavanaugh Creek</u> *	Mouth to Headwaters	0.0-1.8	Jackson
<u>Indian Creek of Eagle Creek</u> *	Mouth to Headwaters	0.0 to 5.4	Carroll
<u>Indian Fork of Sixmile Creek of Kentucky River</u> *	Mouth to Headwaters	0.0-3.3	Shelby
<u>John Carpenter Fork of Clemons Fork of Buckhorn Creek</u> *	Mouth to Headwaters	0.0-1.2	Breathitt
<u>Katies Creek of Red Bird River</u>	Mouth to Headwaters	0.0-4.0	Clay
<u>Laurel Fork of Left Fork Buffalo Creek of Buffalo Creek</u> *	Cortland Fork to Big Branch	0.0-3.75	Owsley
<u>Left Fork of Big Double Creek</u>	Mouth to Headwaters	0.0-1.5	Clay

of Kentucky River*			
Line Fork of North Fork of Kentucky River*	Defeated Creek to Headwaters	12.2-28.6	Letcher
Little Middle Fork of Elisha Creek of Red Bird River*	Mouth to Headwaters	0.0-0.75	Clay
Little Millseat Branch of Clemons Fork of Buckhorn Creek*	Mouth to Headwaters	0.0-1.2	Breathitt
Little Sixmile Creek of Sixmile Creek of Kentucky River*	Mouth to Headwaters	0.0-5.3	Henry
Lower Howard Creek of Kentucky River	Mouth to West Fork	0.0-2.7	Clark
Lulbegrud Creek of Red River	Mouth to Falls Branch	0.0-7.3	Clark, Powell
Middle Fork of Kentucky River	Mouth to Upper Twin Creek	0.0-12.7	Lee, Owsley
Middle Fork of Kentucky River*	Hurts Creek to Greasy Creek	75.6-85.8	Leslie
Middle Fork of Red River	South Fork of Red River to Natural Bridge State Park Lake	1.8-7.2	Powell
Mikes Branch of Laurel Fork of Left Fork of Buffalo Creek	Mouth to Headwaters	0.0-0.7	Owsley
Mill Creek of Kentucky River*	Upstream of Mouth to Headwaters	0.5-8.3	Owen
Millseat Branch of Clemons Fork of Buckhorn Creek*	Mouth to Headwaters	0.0-1.85	Breathitt
Muddy Creek of Kentucky River*	Elliston, Kentucky to Viney Creek	13.8-20.65	Madison
Musselman Creek of Eagle Creek*	Mouth to Headwaters	0.0-9.0	Grant
Red Bird River of South Fork of Kentucky River	Mouth to Big Creek	0.0-15.3	Clay
Right Fork of Buffalo Creek of Kentucky River*	Mouth to Headwaters	0.0-11.75	Owsley
Right Fork of Elisha Creek of Redbird River	Mouth to Headwaters	0.0-3.3	Leslie
Roaring Fork of Lewis Fork of Buckhorn Creek*	Mouth to Headwaters	0.0-0.9	Breathitt

Rock Lick Creek of South Fork of Station Camp Creek*	Mouth to Headwaters	0.0-9.6	Jackson
Sand Ripple Creek of Kentucky River*	Kentucky River Backwaters to Headwaters	0.1-3.9	Henry
Severn Creek of Kentucky River*	Kentucky River Backwaters to North Fork of Severn Creek	1.35-3.0	Owen
Shaker Creek of Kentucky River	Near Mouth to Shawnee Run	0.1-1.4	Mercer
Shelly Rock Fork of Millseat Branch of Clemons Fork*	Mouth to Headwaters	0.0-0.6	Breathitt
Sixmile Creek of Kentucky River*	Little Sixmile Creek to Dam	7.1-15.3	Henry
South Fork of Kentucky River	Mouth to Sexton Creek	0.0-27.8	Owsley
South Fork of Red River	Mouth to Sandlick Fork	0.0-4.2	Powell
South Fork of Station Camp Creek of Kentucky River*	Mouth to Rock Lick Creek	0.0-9.7	Jackson
Spruce Branch of Redbird River*	Mouth to Headwaters	0.0-1.0	Clay
Station Camp Creek of Kentucky River*	Landuse Change to South Fork of Station Camp Creek	18.0-22.8	Estill
Steeles Run of Elkhorn Creek	Mouth to Unidentified Tributary	0.0-4.2	Fayette
Steer Fork of War Fork of Station Camp Creek*	Mouth to Headwaters	0.0-2.7	Jackson
Sturgeon Creek of Kentucky River*	Duck Fork to Little Sturgeon Creek	1.3-13.7	Lee, Owsley
Sugar Creek of Redbird River*	Landuse Change to Headwaters	0.6-5.4	Leslie
Sulphur Lick Creek of Elkhorn Creek	Mouth to Headwaters	0.0-5.2	Franklin
Unidentified Tributary of Cawood Branch of Beech Fork*	Mouth to Headwaters	0.0-2.1	Leslie
Unidentified Tributary of Cedar Creek of Kentucky River*	Mouth to Headwaters	0.0-1.4	Owen
Unidentified Tributary of Glenss Creek of Kentucky	Mouth to Headwaters	0.0 to 1.9	Woodford

River*			
Unidentified Tributary of Jacks Creek of Kentucky River*	Mouth to Headwaters	0.0-1.15	Madison
Unidentified Tributary of Kentucky River*	Land Use Change to Headwaters	0.1-1.4	Franklin
Unidentified Tributary of Line Fork of North Fork of Kentucky River* (LCW)	Mouth to Headwaters	0.0-0.6	Letcher
War Fork of Station Camp Creek*	Mouth to Headwaters	0.0-13.8	Jackson
Watches Fork of Laurel Fork of Left Fork of Buffalo Creek	Mouth to Headwaters	0.0-1.0	Owsley
Wolfpen Creek of Red River*	Mouth to Headwaters	0.0-3.6	Menifee
SALT RIVER BASIN			
Brashears Creek of Salt River	Guist Creek to Bullskin and Clear Creek	13.0-25.9	Shelby, Spencer
Cedar Creek of Salt River*	Mouth to Greens Branch	0.0-5.2	Bullitt
Chaplin River of Salt River*	Thompson Creek to Cornishville, KY	40.9-54.2	Washington
Doctors Fork of Chaplin River	Mouth to Begley Branch	0.0-3.8	Boyle
Guist Creek of Brashears Creek	Mouth to Jephtha Creek	0.0-15.7	Spencer
Harts Run of Wilson Creek of Rolling Fork of Salt River*	Mouth to Headwaters	0.0-1.8	Bullitt
Indian Creek of Thompson Creek of Chaplin River of Salt River	Mouth to Unidentified Tributary	0.0-0.9	Mercer
Lick Creek of Long Lick Creek of Beech Fork of Salt River*	Mouth to 0.1 miles below Dam	0.0-4.1	Washington
Otter Creek of Rolling Fork of Salt River*	Landuse Change to confluence of East Fork and Middle Fork Otter Creek	1.7-2.9	Larue
Overalls Creek of Wilson Creek of Rolling Fork of Salt River*	Mouth to Headwaters of Middle Fork of Overalls Creek	0.0-3.2	Bullitt
Salt Lick Creek of Rolling Fork of Salt River*	Mouth to Headwaters	0.0-8.6	Larue, Marion
Sulphur Creek of Chaplin	Mouth to confluence of Cheese Lick and	0.0-10.0	Anderson, Mercer, Washington

River*	Brush Creek		
Unidentified Tributary of Glens Creek of Chaplin River	Mouth to Headwaters	0.0-2.3	Washington
West Fork of Otter Creek of Rolling Fork of Salt River*	Mouth to Headwaters	0.0-5.1	Larue
Wilson Creek of Rolling Fork of Salt River*	Mouth to Headwaters	0.0-18.4	Bullitt, Nelson
GREEN RIVER BASIN			
Beaverdam Creek of Green River*	Mouth to Headwaters	0.0-14.5	Edmonson
Big Brush Creek of Green River	Brush Creek to Poplar Grove Branch	13.0-17.3	Green
Cane Run of Nolin River*	Nolin River Lake Backwaters to Headwaters	0.8-6.5	Hart
Caney Fork of Peter Creek*	Mouth to Headwaters	0.0-6.7	Barren
Clifty Creek of Rough River*	Barton Run to Western Kentucky Parkway	7.3-17.2	Grayson
Clifty Creek of Wolf Lick Creek*	Little Clifty Creek to Sulphur Lick	7.6-13.4	Todd
East Fork of Little Barren River*	Red Lick Creek to Flat Creek	18.9-20.7	Metcalfe
Elk Lick Creek	Duck Lick Creek to Barren Fork Creek and Edger Creek	3.6 to 11.8	Allen Logan
Ellis Fork of Damron Creek*	Mouth to Headwaters	0.0-3.2	Adair, Russell
Falling Timber Creek of Skaggs Creek*	Landuse Change to Headwaters	10.8-15.2	Barren, Metcalfe
Fiddlers Creek of North Fork of Rough River*	Mouth to Headwaters	0.0-5.9	Breckinridge
Forbes Creek of Buck Creek of East Fork of Pond River*	Mouth to Unidentified Tributary	0.0-4.1	Christian
Gasper River of Barren River*	Clear Fork to Wiggington Creek	17.2-35.6	Logan, Warren
Goose Creek of Green River*	Mouth to Little Goose Creek	0.0-8.5	Casey, Russell
Green River	Downstream Mammoth Cave National Park Boundary to Lynn Camp Creek	185.0-250.3	Edmonson, Hart
Halls Creek of Rough River*	Unidentified Tributary to Headwaters	7.15-9.6	Ohio
Lick Creek of West Fork of	Mouth to Headwaters	0.0-10.2	Simpson

Drakes Creek*			
Linders Creek of Rough River*	Mouth to Sutzer Creek	0.0-7.9	Hardin
Little Beaverdam Creek of Green River*	Mouth to SR 743	0.0-11.65	Edmonson, Warren
Little Short Creek of Rough River*	Mouth to Headwaters	0.0-3.1	Grayson
Lynn Camp Creek of Green River*	Mouth to Lindy Creek	0.0-8.5	Hart
McFarland Creek of West Fork of Pond River*	Grays Branch to Unidentified Tributary	1.5-5.0	Christian
Meeting Creek of Rough River*	Little Meeting Creek to Petty Branch	5.2-14.0	Grayson, Hardin
Muddy Creek of Caney Creek of Rough River*	Landuse Change to Headwaters	13.0-15.5	Ohio
North Fork of Rough River*	Buffalo Creek to Reservoir Dam	22.1-26.9	Breckinridge
Peter Creek of Barren River*	Caney Fork to Dry Fork	11.6-18.5	Barren
Pond Run of Rough River*	Landuse Change to Headwaters	1.4-6.8	Breckinridge, Ohio
Puncheon Creek	Mouth to Tennessee State Line	0.0-3.8	Logan
Rough River*	Linders Creek to Vertrees Creek	138.0-149.4	Hardin
Russell Creek of Green River*	Mouth to Columbia WWTP	0.0-40.0	Green, Adair
Russell Creek of Green River*	Reynolds Creek to confluence with Hudson Creek and Mount Olive Creek	56.9-66.3	Adair, Russell
Sixes Creek of Indian Camp Creek*	Wild Branch to Headwaters	2.0-7.5	Ohio
Sulphur Branch of Alexander Creek*	Mouth to Headwaters	0.0-3.0	Edmonson
Thompson Branch of West Fork of Drakes Creek	Webb Branch to Tennessee State Line	0.3-1.5	Simpson
Trammel Creek of Drakes Creek*	Mouth to Tennessee State Line	0.0-30.6	Allen, Warren
Unidentified Tributary of Green River*	Landuse Change to Headwaters	1.7-3.2	Adair
Unidentified Tributary of White Oak Creek*	Hovious Rd Crossing to SR 76	0.4-2.9	Adair
West Fork of	Unidentified	12.45-	Christian

Pond River*	Tributary to East Branch of Pond River	22.5	
LOWER CUMBERLAND RIVER BASIN			
Crooked Creek of Cumberland River*	Energy Lake Backwaters to Headwaters	3.0-9.4	Trigg
Donaldson Creek of Cumberland River*	Craig Branch to Unidentified Tributary	3.2-7.2	Trigg
Elk Fork of Red River of Cumberland River*	Tennessee State Line to Dry Branch	7.5-23.1	Todd
Sugar Creek of Cumberland River*	Lick Creek to Unidentified Tributary	2.2-6.9	Livingston
West Fork of Red River of Cumberland River*	Tennessee State Line to Montgomery Creek	16.1-26.5	Christian
Whippoorwill Creek of Red River of Cumberland River*	Mouth to Vicks Branch	0.0-13.2	Logan
TENNESSEE RIVER BASIN			
Blood River of Kentucky Lake (Tennessee River)*	McCullough Fork to Tennessee State Line	15.15-18.7	Calloway
Clarks River of Tennessee River	Persimmon Slough to Middle Fork Creek	28.7-30.7	Marshall
Grindstone Creek of Kentucky Lake (Blood River of Tennessee River)*	Kentucky Lake Backwaters to Headwaters	0.7-2.9	Calloway
Panther Creek of Kentucky Lake (Blood River of Tennessee River)*	Kentucky Lake Backwaters to Headwaters	0.5-5.7	Calloway
Soldier Creek of West Fork of Clarks River*	Mouth to South Fork of Soldier Creek	0.0-5.7	Marshall
Sugar Creek of Kentucky Lake (Tennessee River)*	Kentucky Lake Backwaters to Buzzard Roost Road	2.5-3.2	Calloway
Sugar Creek of West Fork Clarks River*	Mouth to Unnamed Reservoir	0.0-3.9	Graves
Trace Creek of West Fork of Clarks River*	Mouth to Neeley Branch	0.0-3.35	Graves
Unidentified Tributary of Unidentified Tributary of Panther Creek of West Fork of Clarks River*	Mouth to Headwaters	0.0-1.7	Graves

West Fork of Clarks River*	Soldier Creek to Duncan Creek	20.1-23.5	Graves
Wildcat Creek of Kentucky Lake (Blood River of Tennessee River)*	Ralph Wright Road Crossing to Headwaters	2.8-6.8	Calloway
TRADEWATER RIVER BASIN			
East Fork of Flynn Fork of Tradewater River*	Landuse Change to Headwaters	2.15-4.6	Caldwell
Piney Creek of Tradewater River*	Lake Beshear Backwaters to Headwaters	4.5-10.2	Caldwell, Christian
Sandlick Creek of Tradewater River*	Camp Creek to Headwaters	4.5-8.6	Christian
Tradewater River*	Dripping Springs Branch to Buntin Lake Dam	126.2-133.9	Christian
Unidentified Tributary of Piney Creek of Tradewater River*	Mouth to Headwaters	0.0-2.9	Caldwell
Unidentified Tributary of Sandlick Creek of Tradewater River*	Mouth to Headwaters	0.0-1.4	Christian
OHIO RIVER BASIN (Minor Tributaries)			
Crooked Creek*	Rush Creek to City Lake Dam	18.1-26.4	Crittenden
Double Lick Creek of Woolper Creek*	Mouth to Headwaters	0.0-3.5	Boone
Garrison Creek*	Mouth to Headwaters	0.0-4.85	Boone
Kinniconick Creek*	McDowell Creek to Headwaters	5.2-50.9	Lewis
Little South Fork of Big South Fork	Land Use Change to Headwaters	1.2-5.8	Boone
Middle Fork of Massac Creek*	Hines Road to Headwaters (Pond)	3.1-6.4	McCracken
Second Creek*	Ohio River Backwaters to Headwaters	0.4-2.9	Boone
Unidentified Tributary of Big Sugar Creek*	I-71 to Headwaters	1.0-1.8	Gallatin
Unidentified Tributary of Corn Creek*	Mouth to Headwaters	0.0-2.3	Trimble
Unidentified Tributary of Massac Creek*	Mouth to Headwaters	0.0-1.7	McCracken
West Fork of Massac Creek*	SR 724 to Little Massac Creek	3.6-6.2	McCracken
Yellowbank Creek*	Ohio River Backwaters to Headwaters	2.0-12.0	Breckinridge



LAKE			
Metropolis	Entire Lake		McCracken
MISSISSIPPI RIVER BASIN (Main Stem and Minor Tributaries)			
Jackson Creek *	Mouth to Headwaters	0.0-3.0	Graves
Obion Creek *	Hurricane Creek to Little Creek	26.7-37.1	Hickman
Terrapin Creek *	Tennessee State Line to Confluence of East and West Forks	2.7-6.0	Graves
LAKES			
Murphy's Pond	Entire Pond and Preserve Area		Hickman
Swan	Entire Lake		Ballard
UPPER CUMBERLAND RIVER BASIN			
Bad Branch of Poor Fork of Cumberland River *	Mouth to Headwaters	0.0-3.0	Letcher
Bark Camp Creek of Cumberland River *	Mouth to Martins Fork	0.0-4.0	Whitley
Beaver Creek of Cumberland River *	Lake Cumberland Backwaters to confluence of Freeman Fork and Middle Fork	2.4-7.1	McCreary
Bee Lick Creek of Brushy Creek of Buck Creek	Mouth to Warren Branch	0.0-5.7	Pulaski
Brownies Creek of Cumberland River *	Blacksnake Branch to Headwaters	9.3-16.75	Bell, Harlan
Brush Creek of Roundstone Creek *	Wolf Creek to Reemergence of Sinking Creek	1.1-7.6	Rockcastle
Brushy Creek of Buck Creek *	Mouth to Headwaters	0.0-16.5	Pulaski
Buck Creek of Cumberland River *	0.8 river mile upstream of confluence of Hurricane Creek to Lake Cumberland Backwaters	11.7-55.0	Lincoln, Pulaski
Bunches Creek of Cumberland River *	Mouth to confluence of Amos Falls Branch and Seminary Branch	0.0-3.3	Whitley
Cane Creek of Rockcastle River *	Mouth to Headwaters	0.0-11.85	Laurel
Clifty Creek of Brushy Creek of Buck Creek	Mouth to Rocky Branch	0.0-2.7	Pulaski
Cogur Fork of Indian Creek *	Mouth to Headwaters	0.0-7.95	McCreary
Cumberland River	Wild River Boundaries	549.65-566.1	McCreary, Whitley
Dog Slaughter Creek of Cumberland	Mouth to confluence of North Fork and	0.05-1.15	Whitley

River*	South Fork of Dog Slaughter Creek		
Eagle Creek of Cumberland River*	Mouth to Headwaters	0.05-6.75	McCreary
Fugitt Creek of Clover Fork of Cumberland River*	Landuse Change to Headwaters	0.5-4.6	Harlan
Horse Lick Creek of Rockcastle River*	Mouth to Clover Bottom	0.0-12.3	Jackson, Rockcastle
Howards Creek of Illwill Creek of Wolf River*	Dale Hollow Reservoir Backwaters to Headwaters	0.6-4.6	Clinton
Indian Creek of Cumberland River*	Laurel Fork to Barren Fork	2.4-6.8	McCreary
Jackie Branch of Bark Camp Creek*	Mouth to Headwaters	0.0-1.65	Whitley
Kilburn Fork of Indian Creek	Mouth to Headwaters	0.0-7.2	McCreary
Laurel Creek of Marsh Creek	Mouth to Laurel Creek Dam	0.0-9.0	McCreary
Laurel Fork of Clear Fork of Cumberland River*	Tennessee State Line to Tiny Branch	4.3-13.1	Whitley
Laurel Fork of Middle Fork of Rockcastle River*	Mouth to Headwaters	0.0-12.3	Jackson
Left Fork of Fugitt Creek of Clover Fork of Cumberland River	Mouth to Headwaters	0.0-1.5	Harlan
Little South Fork of Cumberland River*	Lake Cumberland Backwaters to Langham Branch	4.4-35.5	McCreary, Wayne
Marsh Creek of Cumberland River*	Laurel Creek to Kentucky/Tennessee State Line	8.8-26.5	McCreary
Martins Fork of Cumberland River	Rough Branch to Headwaters	27.2-32.7	Harlan
McFarland Creek of Cumberland River	Little McFarland Creek to Spring Branch	0.8-6.2	Monroe
Meshack Creek of Cumberland River	Mouth to Pitcock Branch	0.0-2.8	Monroe
Middle Fork of Rockcastle River*	Mouth to confluence of Indian Creek and Laurel Fork	0.0-7.9	Jackson
Mud Camp Creek of Cumberland River*	Mouth to Collins Branch	0.0-1.2	Cumberland
Mud Camp Creek of Cumberland	Unidentified Tributary to Headwaters	3.8-8.8	Cumberland, Monroe

River*			
Otter Creek of Cumberland River	Lake Cumberland Backwaters to Carpenter Fork	14.0-22.1	Wayne
Poor Fork of Cumberland River*	Franks Creek to Headwaters	42.1-52.4	Letcher
Presley House Branch of Poor Fork of Cumberland River*	Mouth to Headwaters	0.0-1.5	Letcher
Puncheoncamp Branch of Rock Creek of South Fork of Cumberland River*	Mouth to Headwaters	0.0-1.85	McCreary
Rock Creek of South Fork of Cumberland River*	White Oak Creek to Tennessee State Line	4.0-21.5	McCreary
Rockcastle River	Wild River Boundaries	8.95-54.7	Laurel, Pulaski
Shillalah Creek of Clear Fork of Yellow Creek*	Mouth to Headwaters	0.0-5.5	Bell
Sinking Creek of Rockcastle River*	Mouth to White Oak Creek	0.0-9.9	Laurel
Sulphur Creek of Wolf River of Obey River*	Dale Hollow Reservoir Backwaters to Headwaters	1.7-5.1	Clinton
South Fork of Dog Slaughter Creek of Cumberland River*	Mouth to Headwaters	0.0-4.6	Whitley
South Fork of Rockcastle River	Mouth to White Oak Creek	0.0-5.8	Laurel
Unidentified Tributary (across from Hemlock Grove) of Rock Creek of South Fork of Cumberland River*	Mouth to Headwaters	0.0-1.3	McCreary
Unidentified Tributary (RMI 17.0 of Rock Creek) of Rock Creek of South Fork of Cumberland River*	Mouth to Headwaters	0.0-1.2	McCreary
Watts Branch of Rock Creek of South Fork of Cumberland River*	Mouth to Headwaters	0.0-2.6	McCreary
Watts Creek of Cumberland River*	Camp Blanton Reservoir to Headwaters	2.4-4.4	Harlan

[Table 2

## SURFACE WATERS CATEGORIZED AS EXCEPTIONAL WATER

Stream	Segment	River Miles	County
BIG SANDY RIVER BASIN			
Hobbs Fork of Pigeonroost Fork of Wolf Creek <sup>2</sup>	Mouth to Headwaters	0.0-3.8	Martin
Lower Pigeon Branch of Elkhorn Creek <sup>2</sup>	Left Fork to Headwaters	0.6-1.9	Pike
Russell Fork of Levisa Fork of Big Sandy River <sup>2</sup>	Clinch Field RR Yard off HWY 80 to Virginia State Line	14.9-16.5	Pike
Toms Branch of Elkhorn Creek <sup>2</sup>	Mouth to Headwaters	0.0-1.6	Pike
Unidentified Tributary of Hobbs Fork <sup>2</sup>	Hobbs Fork of Pigeonroost Fork to Headwaters	0.0-0.6	Martin
LITTLE SANDY RIVER BASIN			
Arabs Fork of Big Sinking Creek <sup>2</sup>	Clay Fork to Headwaters	0.0-5.7	Elliott
Big Caney Creek <sup>2</sup>	Grayson Lake to Headwaters	0.6 to 13.6	Elliott, Rowan
Big Sinking Creek of Little Sandy River <sup>2</sup>	SR 986 to Clay Fork and Arab Fork	11.1-15.9	Garter, Elliott
Meadow Branch of Little Fork of Little Sandy River <sup>2</sup>	Mouth to Headwaters	0.0-1.4	Elliott
Middle Fork of Little Sandy River <sup>2</sup>	Mouth to Sheepskin Branch	0.0-3.4	Elliott
Nichols Fork of Little Fork of Little Sandy River <sup>2</sup>	Green Branch to Headwaters	0.0-1.6	Elliott
Laurel Creek of Little Sandy River <sup>2</sup>	Garter School Rd Bridge to Headwaters	7.7-14.7	Elliott, Rowan
LICKING RIVER BASIN			
Blackwater Creek of Licking River <sup>2</sup>	Eaton Creek to Greasy Fork	3.2-11.1	Morgan
Blanket Creek of Licking River	Mouth to Unidentified Tributary	0.0-1.9	Pendleton
Botts Fork of Brushy Fork of Licking River <sup>2</sup>	Mouth to Landuse Change	0.0-2.2	Menifee
Bowman Creek of Licking River	Mouth to Unidentified Tributary	0.0-6.0	Kenton
Brushy Fork of Meyers Creek <sup>2</sup>	Cave Run Lake Backwaters to Headwaters	0.6-5.0	Menifee
Brushy Fork of	Mouth to Headwaters	0.0-5.8	Pendleton

South Fork of Grassy Creek <sup>2</sup>			
Bucket Branch of North Fork of Licking River <sup>2</sup>	Mouth to Headwaters	0.0-1.9	Morgan
Cedar Creek of Licking River	Mouth to North Branch of Cedar Creek	0.0-1.7	Robertson
Crane Creek of Licking River	Mouth to Headwaters	0.0-11.2	Morgan, Rowan
Devils Fork of North Fork of Licking River <sup>2</sup>	Mouth to Headwaters	0.0-8.4	Elliott, Morgan
Flour Creek of Licking River	Mouth to Unidentified Tributary	0.0-2.2	Pendleton
Groves Creek of Kincaid Creek <sup>2</sup>	Kincaid Lake Backwaters to Unidentified Tributary	0.5-3.4	Bracken, Pendleton
Licking River	SR 211 to unnamed Rd off Slatey Point Rd	159.5-170.6	Bath, Rowan
Little South Fork of Big South Fork of Ohio River	Land Use Change to Headwaters	1.2-5.9	Boone
North Fork of Licking River <sup>2</sup>	Cave Run Lake Backwaters to Devils Fork	9.9-14.2	Morgan
Sawyers Fork of Gruises Creek	Mouth to Headwaters	0.0-3.3	Kenton
Slabcamp Creek of Crane Creek of Licking River	Mouth to Headwaters	0.0-3.7	Rowan
Slate Creek of Licking River	Mouth to Mill Creek	0.0-13.6	Bath
South Fork Grassy Creek of Grassy Creek of Licking River <sup>2</sup>	Mouth to Greasy Creek	0.0-10.8	Kenton, Pendleton
Unidentified Tributary of Shannon Creek of North Fork of Licking River	Mouth to Headwaters	0.0-2.2	Mason
Welch Fork of Brushy Fork of Licking River <sup>2</sup>	Mouth to First Road Crossing	0.0-1.0	Menifee
West Creek of Licking River <sup>2</sup>	Mouth to Headwaters	0.0-9.7	Harrison, Robertson
KENTUCKY RIVER BASIN			
Backbone Creek of Sixmile Creek of Kentucky River	Mouth to Scrabble Creek	0.0-1.7	Franklin, Henry, Shelby

<del>Bear Branch of North Fork of Kentucky River</del>	<del>Above Sediment Pond to Headwaters</del>	<del>0.3-1.2</del>	<del>Perry</del>
<del>Big Double Creek of Red Bird River<sup>2</sup></del>	<del>Mouth to Headwaters</del>	<del>0.0-4.4</del>	<del>Clay</del>
<del>Bill Branch of Laurel Fork of Greasy Creek<sup>2</sup></del>	<del>Mouth to Right Fork and Left Fork Creek</del>	<del>0.0-0.3</del>	<del>Leslie</del>
<del>Billey Fork of Millers Creek</del>	<del>Land Use Change to Headwaters</del>	<del>2.6-8.8</del>	<del>Lee, Elliott</del>
<del>Bill Oak Branch of Left Fork of Buffalo Creek</del>	<del>Mouth to Headwaters</del>	<del>0.0-0.6</del>	<del>Owsley</del>
<del>Buffalo Creek of South Fork of Kentucky River<sup>2</sup></del>	<del>Mouth to Right Fork and Left Fork</del>	<del>0.0-1.6</del>	<del>Owsley</del>
<del>Cavanaugh Creek<sup>2</sup></del>	<del>South Fork of Station Camp Creek to Foxtown Rd</del>	<del>0.0-5.1</del>	<del>Jackson</del>
<del>Cherry Run of Boyd Run of North Elkhorn Creek</del>	<del>Mouth to Boyd Run</del>	<del>0.0-0.9</del>	<del>Scott</del>
<del>Ghoster Creek of Middle Fork of Red River<sup>2</sup></del>	<del>Mouth to Headwaters</del>	<del>0.0-2.8</del>	<del>Wolfe</del>
<del>Clear Creek of Kentucky River<sup>2</sup></del>	<del>Mouth to East Fork Clear Creek</del>	<del>0.0-9.0</del>	<del>Woodford</del>
<del>Clemens Fork of Buckhorn Creek<sup>2</sup></del>	<del>Mouth to Headwaters</del>	<del>0.0-4.8</del>	<del>Breathitt</del>
<del>Coles Fork of Buckhorn Creek<sup>2</sup></del>	<del>Mouth to Headwaters</del>	<del>0.0-6.3</del>	<del>Breathitt</del>
<del>Craig Creek of Kentucky River<sup>2</sup></del>	<del>Mouth to Unidentified Tributary</del>	<del>0.0-2.7</del>	<del>Woodford</del>
<del>Deep Ford Branch of Cutshin Creek</del>	<del>Above Pond to Headwaters</del>	<del>0.3-1.3</del>	<del>Leslie</del>
<del>Drennon Creek of Kentucky River<sup>2</sup></del>	<del>Fivemile Creek to Town Branch</del>	<del>8.7-12.2</del>	<del>Henry</del>
<del>East Fork of Indian Creek of Indian Creek of Red River<sup>2</sup></del>	<del>West Fork of Indian Creek to Headwaters</del>	<del>0.0-9.1</del>	<del>Menifee</del>
<del>Elisha Creek of Red Bird River<sup>2</sup></del>	<del>Land Use Change (Residential) to the confluence of Right Fork and Middle Fork Elisha Creek</del>	<del>0.8-1.8</del>	<del>Leslie</del>
<del>Emily Run of Drennon Creek</del>	<del>Mouth to Unidentified Tributary</del>	<del>0.0-3.0</del>	<del>Henry</del>
<del>Evans Fork of Billey Fork of Millers Creek<sup>2</sup></del>	<del>Mouth to Headwaters</del>	<del>0.0-3.0</del>	<del>Estill</del>

Falling Rock Branch of Clemons Fork of Buckhorn Creek <sup>2</sup>	Mouth to Headwaters	0.0-0.7	Breathitt
Gilberts Creek of Kentucky River	Mouth to Unidentified Tributary	0.0 to 2.6	Anderson
Gladie Creek of Red River <sup>2</sup>	Land Use Change to Long Branch	0.35 to 7.3	Menifee
Goose Creek of South Fork of Kentucky River	Mouth to Laurel Creek	0.0-0.4	Clay, Leslie
Griers Creek of Kentucky River <sup>2</sup>	Kentucky River Backwaters to Unidentified Tributary	0.1 to 3.5	Woodford
Grindstone Creek of Kentucky River <sup>2</sup>	Kentucky River Backwaters to Headwaters	0.1 to 1.9	Franklin
Hardwick Creek of Red River	Mouth to Little Hardwick Creek	0.0-3.2	Powell
Hell For Certain of Middle Fork of Red River	Mouth to Big Fork	0.0-2.4	Leslie
Hines Creek of Kentucky River <sup>2</sup>	Kentucky River Backwaters to confluence with Unidentified Tributary	0.1 to 1.9	Madison
Honey Branch of Greasy Creek of Middle Fork of Kentucky River <sup>2</sup>	Mouth to Headwaters	0.0-1.4	Leslie
Hopper Cave Branch of Cavanaugh Creek <sup>2</sup>	Mouth to Headwaters	0.0-1.8	Jackson
Indian Creek of Eagle Creek <sup>2</sup>	Mouth to Headwaters	0.0 to 5.4	Carroll
Indian Fork of Sixmile Creek of Kentucky River <sup>2</sup>	Mouth to Headwaters	0.0-3.3	Shelby
John Carpenter Fork of Clemons Fork of Buckhorn Creek <sup>2</sup>	Mouth to Headwaters	0.0-1.2	Breathitt
Katies Creek of Red Bird River	Mouth to Headwaters	0.0-4.0	Clay
Laurel Fork of Left Fork Buffalo Creek of Buffalo Creek	Cortland Fork to Big Branch	2.1-3.8	Owsley
Left Fork of Big Double Creek of Kentucky River <sup>2</sup>	Mouth to Headwaters	0.0-1.5	Clay
Line Fork of North	Defeated Creek to Headwaters	12.2-28.7	Letcher

Fork of Kentucky River <sup>2</sup>			
Little Middle Fork of Elisha Creek of Red Bird River	Mouth to Headwaters	0.0-0.75	Clay
Little Millseat Branch of Glemons Fork of Buckhorn Creek <sup>2</sup>	Mouth to Headwaters	0.0-1.2	Breathitt
Little Sixmile Creek of Sixmile Creek of Kentucky River <sup>2</sup>	Mouth to Headwaters	0.0-5.3	Henry
Lower Howard Creek of Kentucky River	Mouth to West Fork	0.0-2.7	Clark
Lulbegrud Creek of Red River	Mouth to Falls Branch	0.0-7.3	Clark, Powell
Middle Fork of Kentucky River	Mouth to Upper Twin Creek	0.0-12.7	Lee, Owsley
Middle Fork of Kentucky River <sup>2</sup>	Hurts Creek to Greasy Creek	73.7-84.0	Leslie
Middle Fork of Red River	South Fork of Red River to Natural Bridge State Park Lake	1.8-8.3	Powell
Mikes Branch of Laurel Fork of Left Fork of Buffalo Creek	Mouth to Headwaters	0.0-0.7	Owsley
Mill Creek of Kentucky River <sup>2</sup>	Upstream of Mouth to Headwaters	0.5-8.3	Owen
Millseat Branch of Glemons Fork of Buckhorn Creek <sup>2</sup>	Mouth to Headwaters	0.0-1.0	Breathitt
Muddy Creek of Kentucky River <sup>2</sup>	Elliston, Kentucky to Viney Creek	13.5-20.7	Madison
Musselman Creek of Eagle Creek <sup>2</sup>	Mouth to Headwaters	0.0-9.0	Grant
Red Bird River of South Fork of Kentucky River	Mouth to Big Creek	0.0-15.3	Clay
Right Fork of Buffalo Creek of Kentucky River <sup>2</sup>	Mouth to Headwaters	0.0-11.75	Owsley
Right Fork of Elisha Creek of Redbird River	Mouth to Headwaters	0.0-3.3	Leslie
Roaring Fork of Lewis Fork of Buckhorn Creek <sup>2</sup>	Mouth to Headwaters	0.0-0.9	Breathitt



Rock Lick Creek of South Fork of Station Camp Creek <sup>2</sup>	Mouth to Headwaters	0.0-0.6	Jackson
Sand Ripple Creek of Kentucky River <sup>2</sup>	Kentucky River Backwaters to Headwaters	0.1-3.9	Henry
Severn Creek of Kentucky River <sup>2</sup>	Kentucky River Backwaters to North Fork of Severn Creek	1.35-3.0	Owen
Shaker Creek of Kentucky River	Near Mouth to Shawnee Run	0.1-1.4	Mercer
Shelly Reek Fork of Millseat Branch of Glemons Fork <sup>2</sup>	Mouth to Headwaters	0.0-0.6	Breathitt
Sixmile Creek of Kentucky River <sup>2</sup>	Little Sixmile Creek to Dam	6.0-15.2	Henry
South Fork of Kentucky River	Mouth to Sexton Creek	0.0-27.9	Owsley
South Fork of Red River	Mouth to Sandlick Fork	0.0-4.3	Powell
South Fork of Station Camp Creek of Kentucky River <sup>2</sup>	Mouth to Rock Lick Creek	0.0-9.7	Jackson
Spruce Branch of Redbird River <sup>2</sup>	Mouth to Headwaters	0.0-1.1	Clay
Station Camp Creek of Kentucky River <sup>2</sup>	Landuse Change to South Fork of Station Camp Creek	18.0-22.8	Estill
Steales Run of Elkhorn Creek	Mouth to Unidentified Tributary	0.0-4.2	Fayette
Steer Fork of War Fork of Station Camp Creek <sup>2</sup>	Mouth to Headwaters	0.0-2.7	Jackson
Sturgeon Creek of Kentucky River <sup>2</sup>	Duck Fork to Little Sturgeon Creek	1.3-13.7	Lee, Owsley
Sugar Creek of Redbird River <sup>2</sup>	Landuse Change to Headwaters	0.6-5.4	Leslie
Sulphur Creek of Elkhorn Creek	Mouth to Headwaters	0.0-5.2	Franklin
Unidentified Tributary of Gawood Branch of Beech Fork <sup>2</sup>	Mouth to Headwaters	0.0-2.1	Leslie
Unidentified Tributary of Cedar Creek of Kentucky River <sup>2</sup>	Mouth to Headwaters	0.0-1.4	Owen
Unidentified	Mouth to Headwaters	0.0 to 1.9	Woodford

<del>Tributary of Glenss Creek of Kentucky River<sup>2</sup></del>			
<del>Unidentified Tributary of Jacks Creek of Kentucky River<sup>2</sup></del>	<del>Mouth to Headwaters</del>	<del>0.0-1.15</del>	<del>Madison</del>
<del>Unidentified Tributary of Kentucky River<sup>2</sup></del>	<del>Land Use Change to Headwaters</del>	<del>0.1-1.4</del>	<del>Franklin</del>
<del>Unidentified Tributary of Line Fork of North Fork of Kentucky River<sup>2</sup> (LCW)</del>	<del>Mouth to Headwaters</del>	<del>0.0-0.6</del>	<del>Letcher</del>
<del>War Fork of Station Camp Creek<sup>2</sup></del>	<del>Mouth to Headwaters</del>	<del>0.0-12.9</del>	<del>Jackson</del>
<del>Watches Fork of Laurel Fork of Left Fork of Buffalo Creek</del>	<del>Mouth to Headwaters</del>	<del>0.0-0.9</del>	<del>Owsley</del>
<del>Wolfpen Creek of Red River<sup>2</sup></del>	<del>Mouth to Headwaters</del>	<del>0.0-3.2</del>	<del>Menifee</del>
<del>SALT RIVER BASIN</del>			
<del>Brashears Creek of Salt River</del>	<del>Guist Creek to Bullskin and Clear Creek</del>	<del>13.0-25.9</del>	<del>Shelby, Spencer</del>
<del>Gedar Creek of Salt River<sup>2</sup></del>	<del>Mouth to Greens Branch</del>	<del>0.0-5.2</del>	<del>Bullitt</del>
<del>Chaplin River of Salt River<sup>2</sup></del>	<del>Thompson Creek to Cornishville, KY</del>	<del>40.0-64.2</del>	<del>Washington</del>
<del>Doctors Fork of Chaplin River</del>	<del>Mouth to Begley Branch</del>	<del>0.0-3.8</del>	<del>Boyle</del>
<del>Guist Creek of Brashears Creek</del>	<del>Mouth to Jephtha Creek</del>	<del>0.0-15.7</del>	<del>Spencer</del>
<del>Harts Run of Wilson Creek of Rolling Fork of Salt River<sup>2</sup></del>	<del>Mouth to Headwaters</del>	<del>0.0-2.4</del>	<del>Bullitt</del>
<del>Indian Creek of Thompson Creek of Chaplin River of Salt River</del>	<del>Mouth to Unidentified Tributary</del>	<del>0.0-0.9</del>	<del>Mercer</del>
<del>Lick Creek of Long Lick Creek of Beech Fork of Salt River</del>	<del>Mouth to 0.1 miles below Dam</del>	<del>0.0-4.1</del>	<del>Washington</del>
<del>Otter Creek of Rolling Fork of Salt</del>	<del>Landuse Change to confluence of East Fork and Middle Fork Otter</del>	<del>1.7-2.7</del>	<del>Larue</del>

River <sup>2</sup>	Creek		
Overalls Creek of Wilson Creek of Rolling Fork of Salt River <sup>1</sup>	Mouth to Headwaters of Middle Fork of Overalls Creek	0.0-3.0	Bullitt
Salt Lick Creek of Rolling Fork of Salt River <sup>2</sup>	Mouth to Headwaters	0.0-8.7	Larue, Marion
Sulphur Creek of Chaplin River <sup>2</sup>	Mouth to confluence of Cheese Lick and Brush Creek	0.0-10.0	Anderson, Mercer, Washington
Unidentified Tributary of Glens Creek of Chaplin River	Mouth to Headwaters	0.0-2.3	Washington
West Fork of Otter Creek of Rolling Fork of Salt River <sup>2</sup>	Mouth to Headwaters	0.0-5.4	Larue
Wilson Creek of Rolling Fork of Salt River <sup>2</sup>	Mouth to Headwaters	0.0-18.4	Bullitt, Nelson
GREEN RIVER BASIN			
Beaverdam Creek of Green River <sup>2</sup>	Mouth to Headwaters	0.0-14.5	Edmonson
Big Brush Creek of Green River	Brush Creek to Poplar Grove Branch	13.0 to 17.4	Green
Gane Run of Nolin River <sup>1</sup>	Nolin River Lake Backwaters to Headwaters	1.0-6.6	Hart
Ganey Fork of Peter Creek <sup>2</sup>	Mouth to Headwaters	0.0-6.7	Barren
Clifty Creek of Rough River <sup>2</sup>	Barton Run to Western Kentucky Parkway	7.3-17.2	Grayson
Clifty Creek of Wolf Lick Creek <sup>1</sup>	Little Clifty Creek to Sulphur Lick	7.6-13.4	Tedd
East Fork of Little Barren River <sup>2</sup>	Red Lick Creek to Flat Creek	19.3-20.6	Metcalf
Elk Lick Creek	Duck Lick Creek to Barren Fork Creek and Edger Creek	3.6 to 11.8	Allen
Ellis Fork of Damron Creek <sup>1</sup>	Mouth to Headwaters	0.0-3.2	Adair, Russell
Falling Timber Creek of Skaggs Creek <sup>2</sup>	Landuse Change to Headwaters	8.0-15.2	Barren, Metcalf
Fiddlers Creek of North Fork of Rough River <sup>2</sup>	Mouth to Headwaters	0.0-6.0	Breckinridge
Forbes Creek of Buck Creek of East Fork of Pond River <sup>2</sup>	Mouth to Unidentified Tributary	0.0-4.4	Christian

<del>Gasper River of Barren River<sup>2</sup></del>	<del>Clear Fork to Wigginton Creek</del>	<del>17.2-35.6</del>	<del>Logan, Warren</del>
<del>Goose Creek of Green River<sup>2</sup></del>	<del>Mouth to Little Goose Creek</del>	<del>0.0-8.4</del>	<del>Casey, Russell</del>
<del>Green River</del>	<del>Downstream Mammoth Cave National Park Boundary to Lynn Camp Creek</del>	<del>183.7-250.3</del>	<del>Edmonson, Hart</del>
<del>Halls Creek of Rough River<sup>2</sup></del>	<del>Unidentified Tributary to Headwaters</del>	<del>7.1-9.7</del>	<del>Ohio</del>
<del>Lick Creek of West Fork of Drakes Creek<sup>2</sup></del>	<del>Mouth to Headwaters</del>	<del>0.0-10.2</del>	<del>Simpson</del>
<del>Linders Creek of Rough River<sup>2</sup></del>	<del>Mouth to Sutzer Creek</del>	<del>0.0-8.0</del>	<del>Hardin</del>
<del>Little Beaverdam Creek of Green River<sup>2</sup></del>	<del>Mouth to SR 743</del>	<del>0.0-11.7</del>	<del>Edmonson, Warren</del>
<del>Little Short Creek of Rough River<sup>2</sup></del>	<del>Mouth to Headwaters</del>	<del>0.0-3.3</del>	<del>Grayson</del>
<del>Lynn Camp Creek of Green River<sup>2</sup></del>	<del>Mouth to Lindy Creek</del>	<del>0.0-8.5</del>	<del>Hart</del>
<del>McFarland Creek of West Fork of Pond River<sup>2</sup></del>	<del>Grays Branch to Unidentified Tributary</del>	<del>1.5-5.8</del>	<del>Christian</del>
<del>Meeting Creek of Rough River<sup>2</sup></del>	<del>Little Meeting Creek to Petty Branch</del>	<del>5.2-13.8</del>	<del>Grayson, Hardin</del>
<del>Muddy Creek of Caney Creek of Rough River<sup>2</sup></del>	<del>Landuse Change to Headwaters</del>	<del>13.0-15.5</del>	<del>Ohio</del>
<del>North Fork of Rough River<sup>2</sup></del>	<del>Buffalo Creek to Reservoir Dam</del>	<del>23.4-28.1</del>	<del>Breckinridge</del>
<del>Peter Creek of Barren River<sup>2</sup></del>	<del>Caney Fork to Dry Fork</del>	<del>11.5-18.4</del>	<del>Barren</del>
<del>Pond Run of Rough River<sup>2</sup></del>	<del>Landuse Change to Headwaters</del>	<del>1.4-6.8</del>	<del>Breckinridge, Ohio</del>
<del>Puncheon Creek of Rough River<sup>2</sup></del>	<del>Mouth to Tennessee State Line</del>	<del>0.0 to 4.3</del>	<del>Logan</del>
<del>Rough River<sup>2</sup></del>	<del>Linders Creek to Vertrees Creek</del>	<del>138.0-140.4</del>	<del>Hardin</del>
<del>Russell Creek of Green River<sup>2</sup></del>	<del>Mouth to Columbia WWTP</del>	<del>0.0-40.9</del>	<del>Green, Adair</del>
<del>Russell Creek of Green River<sup>2</sup></del>	<del>Reynolds Creek to confluence with Hudson Creek and Mount Olive Creek</del>	<del>56.8-66.3</del>	<del>Adair, Russell</del>
<del>Sixes Creek of Indian Camp Creek<sup>2</sup></del>	<del>Wild Branch to Headwaters</del>	<del>1.9-7.6</del>	<del>Ohio</del>
<del>Sulphur Branch of Alexander Creek<sup>2</sup></del>	<del>Mouth to Headwaters</del>	<del>0.0-3.0</del>	<del>Edmonson</del>
<del>Thompson Branch</del>	<del>Webb Branch to Tennessee State</del>	<del>0.3-1.5</del>	<del>Simpson</del>

of West Fork of Drakes Creek	Line		
Trammel Fork of Drakes Creek <sup>2</sup>	Mouth to Tennessee State Line	0.0-30.6	Allen, Warren
Unidentified Tributary of Green River <sup>2</sup>	Landuse Change to Headwaters	1.0-3.3	Adair
Unidentified Tributary of White Oak Creek <sup>2</sup>	Hevious Rd Crossing to SR 76	0.4-2.0	Adair
West Fork of Pond River <sup>2</sup>	Unidentified Tributary to East Branch of Pond River	12.4-22.5	Christian
LOWER CUMBERLAND RIVER BASIN			
Crooked Creek of Cumberland River <sup>2</sup>	Energy Lake Backwaters to Headwaters	3.0-9.4	Trigg
Donaldson Creek of Cumberland River <sup>2</sup>	Graig Branch to Unidentified Tributary	3.2-7.2	Trigg
Elk Creek of Red River of Cumberland River <sup>2</sup>	Tennessee State Line to Dry Branch	7.5-22.3	Todd
Sugar Creek of Cumberland River <sup>2</sup>	Lick Creek to Unidentified Tributary	2.2-6.9	Livingston
West Fork of Red River of Cumberland River <sup>2</sup>	Tennessee State Line to Montgomery Creek	16.1-26.5	Christian
Whippoorwill Creek of Red River of Cumberland River <sup>2</sup>	Mouth to Vicks Branch	0.0-13.2	Logan
TENNESSEE RIVER BASIN			
Blood River of Kentucky Lake (Tennessee River) <sup>2</sup>	McCullough Fork to Tennessee State Line	12.5-16.0	Galloway
Clarks River of Tennessee River	Persimmon Slough to Middle Fork Creek	28.7-30.7	Marshall
Grindstone Creek of Kentucky Lake (Blood River of Tennessee River) <sup>2</sup>	Kentucky Lake Backwaters to Headwaters	0.6-2.9	Galloway
Panther Creek of Kentucky Lake (Blood River of Tennessee River) <sup>2</sup>	Kentucky Lake Backwaters to Headwaters	0.5-5.7	Galloway
Soldier Creek of West Fork of Clarks River <sup>2</sup>	Mouth to South Fork of Soldier Creek	0.0-5.7	Marshall
Sugar Creek of Kentucky Lake	Kentucky Lake Backwaters to Buzzard Roost Road	1.9-3.1	Galloway

(Tennessee River) <sup>2</sup>			
Sugar Creek of West Fork Clarks River <sup>2</sup>	Mouth to Unnamed Reservoir	0-0-4.2	Graves
Trace Creek of West Fork of Clarks River <sup>2</sup>	Mouth to Neeley Branch	0-0-3.3	Graves
Unidentified Tributary of Panther Creek of West Fork of Clarks River <sup>2</sup>	Mouth to Headwaters	0-0-2.1	Graves
West Fork of Clarks River <sup>2</sup>	Soldier Creek to Duncan Creek	20.1-23.4	Graves
Wildcat Creek of Kentucky Lake (Blood River of Tennessee River) <sup>4</sup>	Ralph Wright Road Crossing to Headwaters	3.1-6.3	Galloway
TRADEWATER RIVER BASIN			
East Fork of Flynn Fork of Tradewater River <sup>2</sup>	Land Use Change to Headwaters	2.1-4.6	Galdwell
Piney Creek of Tradewater River <sup>2</sup>	Lake Beshear Backwaters to Headwaters	4.5-10.2	Galdwell, Christian
Sandlick Creek of Tradewater River <sup>2</sup>	Camp Creek to Headwaters	4.0-8.6	Christian
Tradewater River <sup>2</sup>	Dripping Springs Branch to Buntin Lake Dam	123.2-131.1	Christian
Unidentified Tributary of Piney Creek of Tradewater River <sup>2</sup>	Mouth to Headwaters	0-0-2.7	Galdwell
Unidentified Tributary of Sandlick Creek of Tradewater River <sup>2</sup>	Mouth to Headwaters	0-0-1.4	Christian
OHIO RIVER BASIN (Minor Tributaries)			
Crooked Creek <sup>2</sup>	Rush Creek to City Lake Dam	18.0-26.4	Crittenden
Double Lick Creek of Woolper Creek <sup>2</sup>	Mouth to Headwaters	0-0-3.4	Boone
Garrison Creek <sup>2</sup>	Mouth to Headwaters	0-0-4.85	Boone
Kinniconick Creek <sup>2</sup>	McDowell Creek to Headwaters	5.0-50.9	Lewis
Little South Fork of Big South Fork	Land Use Change to Headwaters	1.2-5.9	Boone
Middle Fork of Massae Creek <sup>2</sup>	Hines Road to Headwaters	3.1-6.4	McCracken
Second Creek <sup>2</sup>	Ohio River Backwaters to	0-4-1.4	Boone

	Headwaters		
Unidentified Tributary of Big Sugar Creek <sup>2</sup>	I-71 to Headwaters	1.0-1.8	Gallatin
Unidentified Tributary of Corn Creek <sup>2</sup>	Mouth to Headwaters	0.0-2.0	Trimble
Unidentified Tributary of Massae Creek <sup>2</sup>	Mouth to Headwaters	0.0-1.7	McCracken
West Fork of Massae Creek <sup>2</sup>	SR 725 to Little Massae Creek	3.6-6.2	McCracken
Yellowbank Creek <sup>2</sup>	Ohio River Backwaters to Headwaters	1.5-12.0	Breckinridge
LAKE			
Metropolis	Entire Lake	-	McCracken
MISSISSIPPI RIVER BASIN (Main Stem and Minor Tributaries)			
Jackson Creek <sup>2</sup>	Mouth to Headwaters	0.0-2.6	Graves
Obion Creek <sup>2</sup>	Hurricane Creek to Little Creek	25.2-35.5	Hickman
Ferrapin Creek <sup>2</sup>	Tennessee State Line to Headwaters	2.8-7.0	Graves
LAKES			
Murphy's Pond	Entire Pond and Preserve Area	-	Hickman
Swan	Entire Lake	-	Ballard
UPPER CUMBERLAND RIVER BASIN			
Bad Branch of Poor Fork of Cumberland River <sup>2</sup>	Mouth to Headwaters	0.0-3.0	Letcher
Bark Camp Creek of Cumberland River <sup>2</sup>	Mouth to Martins Fork	0.0-4.0	Whitley
Beaver Creek of Cumberland River <sup>2</sup>	Lake Cumberland Backwaters to confluence of Freeman Fork and Middle Fork	2.0-6.5	McCreary
Bee Lick Creek of Brushy Creek of Buck Creek	Mouth to Warren Branch	0.0-5.7	Pulaski
Brownies Creek of Cumberland River <sup>2</sup>	Blacksnake Branch to Headwaters	0.3-16.7	Bell, Harlan
Brush Creek of Roundstone Creek	Wolf Creek to Reemergence of Sinking Creek	1.1-7.6	Rockcastle
Brushy Creek of Buck Creek <sup>2</sup>	Mouth to Headwaters	0.0-16.5	Pulaski
Buck Creek of Cumberland River <sup>2</sup>	0.8 river mile upstream of confluence of Hurricane Creek to Lake Cumberland Backwaters	8.3-63.3	Lincoln, Pulaski
Bunches Creek of Cumberland River <sup>2</sup>	Mouth to confluence of Amos Falls Branch and Seminary Branch	0.0-3.5	Whitley

Gane Creek of Rockcastle River <sup>2</sup>	Mouth to Headwaters	0.0-11.9	Laurel
Clifty Creek of Brushy Creek of Buck Creek	Mouth to Rocky Branch	0.0-2.7	Pulaski
Gegur Fork of Indian Creek <sup>2</sup>	Mouth to Headwaters	0.0-7.9	McCreary
Cumberland River	Wild River Boundaries	558.5-575.1	McCreary, Whitley
Dog Slaughter Creek of Cumberland River <sup>2</sup>	Mouth to confluence of North Fork and South Fork of Dog Slaughter Creek	0.0-1.1	Whitley
Eagle Creek of Cumberland River <sup>2</sup>	Mouth to Headwaters	0.0-6.7	McCreary
Fugitt Creek of Glover Fork of Cumberland River <sup>2</sup>	Landuse Change to Headwaters	0.5-4.6	Harlan
Horse Lick Creek of Rockcastle River <sup>2</sup>	Mouth to Clover Bottom	0.0-12.4	Jackson, Rockcastle
Howards Creek of Illwill Creek of Wolf River <sup>2</sup>	Dale Hollow Reservoir Backwaters to Headwaters	0.6-4.6	Clinton
Indian Creek of Cumberland River <sup>2</sup>	Laurel Fork to Barren Fork	2.3-6.8	McCreary
Jackie Branch of Bark Camp Creek <sup>2</sup>	Mouth to Headwaters	0.0-1.7	Whitley
Kilburn Fork of Indian Creek	Mouth to Headwaters	0.0-7.2	McCreary
Laurel Creek of Marsh Creek	Mouth to Laurel Creek Dam	0.0-9.0	McCreary
Laurel Fork of Glear Fork of Cumberland River <sup>2</sup>	Tennessee State Line to Tiny Branch	4.7-13.1	Whitley
Laurel Fork of Middle Fork of Rockcastle River <sup>2</sup>	Mouth to Headwaters	0.0-12.4	Jackson
Left Fork of Fugitt Creek of Glover Fork of Cumberland River	Mouth to Headwaters	0.0-1.5	Harlan
Little South Fork of Cumberland River <sup>2</sup>	Lake Cumberland Backwaters to Langham Branch	2.7-35.6	McCreary, Wayne
Marsh Creek of Cumberland River <sup>2</sup>	Laurel Creek to Headwaters	8.8-26.3	McCreary
Martins Fork of Cumberland River	Rough Branch to Headwaters	27.3-37.3	Harlan
McFarland Creek of Cumberland	Little McFarland Creek to Spring Branch	0.8-6.2	Monroe



River			
Meshack Creek of Cumberland River	Mouth to Pitecock Branch	0.0-2.8	Monroe
Middle Fork of Rockcastle River <sup>2</sup>	Mouth to confluence of Indian Creek and Laurel Fork	0.0-7.9	Jackson
Mud Camp Creek of Cumberland River <sup>2</sup>	Mouth to Collins Branch	0.0-1.2	Cumberland
Mud Camp Creek of Cumberland River <sup>2</sup>	Unidentified Tributary to Headwaters	3.8-8.8	Cumberland, Monroe
Otter Creek of Cumberland River	Lake Cumberland Backwaters to Carpenter Fork	15.6-24.3	Wayne
Peer Fork of Cumberland River <sup>2</sup>	Franks Creek to Headwaters	41.4-51.7	Letcher
Presley House Branch of Peer Fork of Cumberland River <sup>2</sup>	Mouth to Headwaters	0.0-1.5	Letcher
Punchcaneamp Branch of Rock Creek of South Fork of Cumberland River <sup>2</sup>	Mouth to Headwaters	0.0-1.9	McCreary
Rock Creek of South Fork of Cumberland River <sup>2</sup>	White Oak Creek to Tennessee State Line	4.1-21.6	McCreary
Rockcastle River	Wild River Boundaries	8.8-24.8	Laurel, Pulaski
Shillalah Creek of Clear Fork of Yellow Creek <sup>2</sup>	Mouth to Headwaters	0.0-5.5	Bell
Sinking Creek of Rockcastle River <sup>2</sup>	Mouth to White Oak Creek	0.0-0.9	Laurel
Sulphur Creek of Wolf River of Obey River <sup>2</sup>	Dale Hollow Reservoir Backwaters to Headwaters	1.4-5.1	Clinton
South Fork of Dog Slaughter Creek of Cumberland River <sup>2</sup>	Mouth to Headwaters	0.0-4.6	Whitley
South Fork of Rockcastle River	Mouth to White Oak Creek	0.0-5.8	Laurel
Unidentified Tributary (across from Hemlock Grove) of Rock Creek of South Fork of Cumberland River <sup>2</sup>	Mouth to Headwaters	0.0-1.9	McCreary

Unidentified Tributary (RMI 17.0 of Rock Creek) of Rock Creek of South Fork of Cumberland River <sup>2</sup>	Mouth to Headwaters	0.0-1.15	McCreary
Watts Branch of Rock Creek of South Fork of Cumberland River <sup>2</sup>	Mouth to Headwaters	0.0-2.6	McCreary
Watts Creek of Cumberland River <sup>2</sup>	Camp Blanton Reservoir to Headwaters	2.2-4.4	Harlan]

[Table 2

## SURFACE WATERS CATEGORIZED AS EXCEPTIONAL WATER

Stream	Segment	River Miles	County
<b>BIG SANDY RIVER BASIN</b>			
Hobbs Fork <sup>2</sup>	Mouth to Headwaters	0.0-3.8	Martin
Hobbs Fork Unidentified Tributary <sup>2</sup>	Hobbs Fork to Headwaters	0.0-0.55	Martin
Lower Pigeon Branch <sup>2</sup>	Left Fork to Headwaters	0.5-1.7	Pike
Russell Fork <sup>2</sup>	Clinch Field RR Yard off HWY 80 to Virginia Stateline	14.4-16	Pike
Toms Branch <sup>2</sup>	Mouth to Headwaters	0.0-1.4	Pike
<b>LITTLE SANDY RIVER BASIN</b>			
Arabs Fork <sup>2</sup>	Clay Fork to Headwaters	0.0-4.7	Carter
Big Caney Creek <sup>2</sup>	Grayson Lake to Headwaters	0.0-14.9	Elliott
Big Sinking Creek <sup>2</sup>	SR 936 to Clay Fork and Arab Fork	10.7-15.2	Carter
Meadow Branch <sup>2</sup>	Mouth to Headwaters	0.0-1.4	Elliott
Middle Fork Little Sandy River <sup>2</sup>	Mouth to Sheepskin Branch	0.0-3.6	Elliott
Nichols Fork <sup>2</sup>	Green Branch to Headwaters	0.0-1.9	Elliott
Laurel Creek <sup>2</sup>	Carter School Rd Bridge to Headwaters	7.6-14.4	Elliott
<b>LICKING RIVER BASIN</b>			
Blackwater Creek <sup>2</sup>	Eaten Creek to Greasy Fork	3.8-11.4	Morgan
Botts Fork	Mouth to Landuse Change	0.0-2.1	Menifee
Brushy Fork	Cave Run Lake Backwaters to Headwaters	0.6-5.0	Menifee
Brushy Fork <sup>2</sup>	Mouth to Headwaters	0.0-5.7	Pendleton
Bucket Branch <sup>2</sup>	Mouth to Headwaters	0.0-1.9	Morgan
Crane Creek	Mouth to Headwaters	0.0-10.0	Rowan
Devils Fork <sup>2</sup>	Mouth to Headwaters	0.0-7.8	Morgan
Grovers Creek <sup>2</sup>	Kincaid Lake Backwaters to Unidentified Tributary	0.5-3.4	Pendleton
Licking River	SR 211 to unnamed Rd off Slatey Point Rd	154.5-165.0	Bath/Rowan
North Fork of Licking River <sup>2</sup>	Cave Run Lake Backwaters to Devils Fork	9.9-14.2	Morgan
Slabcamp Creek	Mouth to Headwaters	0.0-3.4	Rowan
South Fork Grassy Creek <sup>2</sup>	Mouth to Greasy Creek	0.0-19.6	Pendleton
Welch Fork <sup>2</sup>	Mouth to First Road Crossing	0.0-1.0	Menifee
West Creek <sup>2</sup>	Mouth to Headwaters	0.0-9.5	Robertson
<b>KENTUCKY RIVER BASIN</b>			
Big Double Creek <sup>2</sup>	Mouth to Headwaters	0.0-6.5	Clay

Bill Branch*	Mouth to Right Fork and Left Fork Creek	0-0-2.2	Leslie
Buffalo Creek*	Mouth to Right Fork and Left Fork	0-0-1.6	Owsley
Cavanaugh Creek*	South Fork of Station Camp Creek to Fextown Rd	0-0-5.3	Jackson
Gawood Branch*	Mouth to Headwaters	0-0-2.1	Leslie
Gedar Creek Unidentified Tributary*	Mouth to Headwaters	0-0-1.4	Owen
Ghester Creek*	Mouth to Headwaters	0-0-2.8	Wolfe
Clear Creek*	Mouth to East Fork Clear Creek	0-0-8.8	Woodford
Glemons Fork*	Mouth to Headwaters	0-0-4.7	Breathitt
Goles Fork*	Mouth to Headwaters	0-0-5.5	Breathitt
Drennon Creek*	Flat Bottom Road Crossing to Town Branch	10.5-11.9	Henry
East Fork of Indian Creek*	West Fork of Indian Creek to Headwaters	0-0-8.5	Menifee
Elisha Creek*	Elisha Creek Rd Crossing to Right Fork and Middle Fork Elisha Creek	0-95-1.7	Leslie
Emily Run	Mouth to Unidentified Tributary	0-0-3.0	Henry
Evans Fork*	Mouth to Headwaters	0-0-2.9	Estill
Falling Rock Branch*	Mouth to Headwaters	0-0-0.6	Breathitt
Gladie Creek*	Mouth to Headwaters	0-0-8.4	Menifee
Glenns Creek Unidentified Tributary	Landuse Change to Headwaters	0-2-1.3	Woodford
Goose Creek	Mouth to Laurel Creek	0-0-9.3	Clay
Griers Creek*	Urban Area to Unidentified Tributary	2-9-3.4	Woodford
Grindstone Creek*	Mouth to Headwaters	0-0-2.2	Franklin
Hardwick Creek	Mouth to Little Hardwick Creek	0-0-3.2	Powell
Hell For Certain	Mouth to Big Fork	0-0-2.1	Leslie
Hines Creek*	Mouth to Hines Creek Road Crossing	0-0-2.4	Madison
Honey Branch	Mouth to Headwaters	0-0-1.4	Leslie
Hopper Cave* Branch	Mouth to Headwaters	0-0-1.6	Jackson
Indian Creek*	Backwater Kentucky River to Headwaters	0-55-4.7	Carroll
Indian Fork*	Mouth to Headwaters	0-0-3.3	Shelby
John Carpenter Fork*	Mouth to Headwaters	0-0-1.5	Breathitt
Left Fork Big Double Creek*	Mouth to Headwaters	0-0-1.5	Clay
Line Fork*	Defeated Creek to Headwaters	11-6-27.5	Letcher
Line Fork Unidentified Tributary* (LCW)	Mouth to Headwaters	0-0-0-55	Letcher
Little Millseat Branch*	Mouth to Headwaters	0-0-1.2	Breathitt
Little Sixmile Creek*	Mouth to Headwaters	0-0-5.2	Henry
Lulbegrud Creek	Mouth to Falls Branch	0-0-7.3	Clark/Powell
Middle Fork of Kentucky River	Mouth to Upper Twin Creek	0-0-12.5	Lee
Middle Fork of Kentucky River	Hyden, Kentucky to Greasy Creek	76.1-84.0	Leslie
Middle Fork of Red River	South Fork Red River to Natural Bridge State Park Lake	1-8-8.3	Powell
Mill Creek*	Mouth to Headwaters	0-0-8.3	Owen
Millseat Branch*	Mouth to Headwaters	0-0-1.9	Breathitt
Muddy Creek*	Elliston, Kentucky to Viney Creek	13.4-20.2	Madison
Musselman Creek*	Mouth to Headwaters	0-0-8.4	Grant
Red Bird River	Mouth to Big Creek	0-0-15.0	Clay
Right Fork of Buffalo Creek*	Mouth to Headwaters	0-0-11.2	Owsley
Roaring Fork*	Mouth to Headwaters	0-0-0-85	Breathitt

Sand Ripple Creek*	Mouth to Headwaters	0.0-3.9	Henry
Severn Creek*	Mouth to North Fork Severn Creek	0.0-2.8	Owen
Shelly Rock Fork*	Mouth to Headwaters	0.0-0.6	Breathitt
Sixmile Creek*	Little Sixmile to Dam	6.9-14.7	Henry
South Fork of Kentucky River	Mouth to Sexton Creek	0.0-27.7	Owsley
South Fork of Red River	Mouth to Sandlick Fork	0.0-3.9	Powell
South Fork of Station Camp Creek*	Mouth to Rock Lick Creek	0.0-9.6	Jackson
Spruce Branch*	Mouth to Headwaters	0.0-1.1	Leslie
Station Camp Creek*	Landuse Change to South Fork Station Camp Creek	19.0-22.3	Estill
Steer Fork*	Mouth to Headwaters	0.0-2.9	Jackson
Sturgeon Creek*	Duck Fork to Little Sturgeon Creek	1.3-13.7	Lee
Sugar Creek*	Landuse Change to Headwaters	0.8-3.8	Leslie
War Fork*	Mouth to Headwaters	0.0-13.7	Jackson
Wolfpen Creek*	Mouth to Headwaters	0.0-3.2	Menifee
SALT RIVER BASIN			
Brashears Creek	Guist Creek to Bullskin and Clear Creek	13.0-25.5	Shelby
Cedar Creek*	Mouth to Greens Branch	0.0-5.1	Bullitt
Chaplin River*	Thompson Creek to Cornishville, KY	40.1-53.7	Washington
Guist Creek	Mouth to Jeptha Creek	0.0-15.4	Spencer
Harts Run*	Mouth to Headwaters	0.0-2.3	Bullitt
Otter Creek*	Landuse Change to East Fork and Middle Fork Otter Creek	1.7-2.7	Larue
Overalls Creek*	Mouth to Headwaters	0.0-1.3	Bullitt
Salt Lick Creek*	Mouth to Headwaters	0.0-8.4	Marion
Sulphur Creek*	Mouth to Chesse Lick and Brush Creek	0.0-9.7	Anderson
West Fork Otter Creek*	Mouth to Headwaters	0.0-4.7	Larue
Wilson Creek*	Mouth to Headwaters	0.0-17.0	Bullitt
GREEN RIVER BASIN			
Beaverdam Creek*	Mouth to Headwaters	0.0-14.1	Edmonson
Gane Run*	Nolin River Backwaters to Headwaters	1-6.5	Hart
Ganey Fork*	Mouth to Headwaters	0.0-6.6	Barren
Gifty Creek*	Barton Run to Western Kentucky Parkway	7.3-17.2	Grayson
Gifty Creek*	Little Gifty Creek to Sulphur Lick	7.7-13.2	Todd
East Fork Little Barren River*	Red Lick Creek to Flat Creek	19-20.2	Metcalf
Ellis Fork*	Mouth to Headwaters	0.0-3.2	Adair
Falling Timber Creek*	Landuse Change to Headwaters	7-15.5	Metcalf
Fiddlers Creek*	Mouth to Headwaters	0.0-5.8	Breckinridge
Forbes Creek*	Mouth to Unidentified Tributary	0.0-3.9	Christian
Gasper River*	Clear Fork to Wiggington Creek	17.0-35.2	Logan
Goose Creek*	Mouth to Little Goose Creek	0.0-8.1	Gasey
Green River	Downstream Mammoth Cave National Park Boundary to Lynn Camp Creek	181.7-207.8	Edmonson
Green River Unidentified Tributary*	Landuse Change to Headwaters	0.8-3.2	Adair
Halls Creek*	Unidentified Tributary to Headwaters	9.6-12.1	Ohio
Lick Creek*	Mouth to Headwaters	0.0-9.9	Simpson
Linders Creek*	Mouth to Sulzer Creek	0.0-7.7	Hardin
Little Beaverdam Creek	Mouth to SR 743	0.0-11.3	Warren

Little Short Creek*	Mouth to Headwaters	0-0-3-0	Graysen
Lynn Camp Creek*	Mouth to Lindy Creek	0-0-8-3	Hart
McFarland Creek*	Grays Branch to Unidentified Tributary	1-4-4-8	Christian
Meeting Creek*	Little Meeting Creek to Petty Branch	5-2-13-8	Hardin
Muddy Creek*	Landuse Change to Headwaters	13-0-15-5	Ohio
North Fork Rough River*	Buffalo Creek to Reservoir Dam	23-44-28-1	Breckinridge
Peter Creek*	Ganey Fork to Dry Fork	11-6-18-5	Barren
Pond Run*	Landuse Change to Headwaters	1-4-6-8	Breckinridge/Ohio
Rough River*	Linders Creek to Vertrees Creek	136-0-147-8	Hardin
Russell Creek*	Mouth to Columbia WWTP	0-0-40-0	Adair
Russell Creek*	Reynolds Creek to Headwaters	55-0-68-2	Adair
Sixes Creek*	Wild Branch to Headwaters	2-0-7-5	Ohio
Sulphur Branch*	Mouth to Headwaters	0-0-2-0	Edmonson
Trammel Fork*	Mouth to Tennessee Stateline	0-0-30-15	Allen
West Fork Pond River*	Unidentified Tributary to East Branch Pond River	12-7-22-5	Christian
White Oak Creek - Unidentified Tributary*	Hovious Rd Crossing to SR 76	0-4-3-0	Adair
LOWER CUMBERLAND RIVER BASIN			
Cracked Creek*	Lake Barkley Backwaters to Headwaters	4-0-0-4	Trigg
Donaldson Creek*	Graig Branch to Unidentified Tributary	6-0-10-3	Trigg
Elk Creek*	Tennessee Stateline to Dry Branch	7-5-0-8	Logan
Sugar Creek*	Lick Creek to Unidentified Tributary	2-1-6-7	Livingston
West Fork of Red River*	Tennessee Stateline to Montgomery Creek	16-1-26-5	Christian
Whippoorwill Creek*	Mouth to Vicks Branch	0-0-13-0	Logan
TENNESSEE RIVER BASIN			
Blood River*	McCullough Fork to Tennessee Stateline	12-2-15-65	Galloway
Clarks River	Persimmon Slough to Middle Fork Creek	26-6-28-4	Marshall
Grindstone Creek*	Mouth to Headwaters	0-0-2-3	Galloway
Panther Creek*	Mouth to Headwaters	0-0-5-1	Galloway
Panther Creek*	Channelization to Impoundment	1-1-6-0	Graves
Panther Creek Unidentified Tributary*	Mouth to Headwaters	0-0-2-1	Graves
Soldier Creek*	Mouth to South Fork Solider	0-0-5-3	Marshall
Sugar Creek*	Kentucky Lake Backwaters to Buzzard Roost Road	2-1-3-3	Galloway
Sugar Creek*	Mouth to Unnamed Reservoir	0-0-4-0	Graves
Trace Creek*	Mouth to Neeley Branch	0-0-3-0	Graves
West Fork Clarks River*	Soldier Creek to Duncan Creek	10-7-22-7	Graves
Wildcat Creek*	Ralph Wright Road Crossing to Headwaters	3-5-6-7	Galloway
TRADEWATER RIVER BASIN			
East Fork Flynn Fork*	Landuse Change to Headwaters	2-5-4-6	Galdwell
Piney Creek*	Lake Beshear Backwaters to Headwaters	4-5-10-2	Galdwell
Piney Creek Unidentified Tributary*	Mouth to Headwaters	0-0-2-0	Galdwell
Sandlick Creek*	Camp Creek to Headwaters	4-9-9-0	Christian
Sandlick Creek Unidentified Tributary*	Mouth to Headwaters	0-0-1-4	Christian
Tradewater River*	Dripping Springs Branch to Buntin Lake Dam	123-2-131-1	Christian
OHIO RIVER BASIN (Main Stem and Minor Tributaries)			
Big Sugar Creek - Unidentified	1-71 to Headwaters	1-0-3-6	Gallatin

Tributary*			
Corn Creek Unidentified Tributary*	Mouth to Headwaters	0.0-2.0	Trimble
Crooked Creek*	Rush Creek to City Lake Dam	17.5-25.6	Crittenden
Double Lick Creek*	Mouth to Landuse Change	0.0-1.4	Boone
Garrison Creek*	Mouth to Headwaters	0.0-4.1	Boone
Kinniconick Creek*	McDowell Creek to Headwaters	5.1-50.4	Lewis
Massae Creek Unidentified Tributary*	Mouth to Headwaters	0.0-1.7	McCracken
Middle Fork Massae Creek*	Hines Road to Headwaters	3.15-6.2	McCracken
West Fork Massae Creek*	SR 725 to Little Massae Creek	3.2-5.4	McCracken
Second Creek*	Private Road Crossing to Headwaters	0.5-2.9	Boone
Yellowbank Creek*	Ohio River Backwaters to Headwaters	1.4-11.4	Breckinridge
LAKES AND RESERVOIRS			
Metropolis	Entire Lake	-	McCracken
Swan	Entire Lake	-	Ballard
MISSISSIPPI RIVER BASIN (Main Stem and Minor Tributaries)			
Jackson Creek*	Mouth to Headwaters	0.0-2.6	Graves
Obion Creek*	Hurricane Creek to Little Creek	25.2-35.5	Hickman
Terrapin Creek*	Tennessee Stateline to Headwaters	2.8-7	Graves
Murphy's Pond	Entire Pond and Preserve Area	-	Hickman
UPPER CUMBERLAND RIVER BASIN			
Bad Branch*	Mouth to Headwaters	0.0-3.0	Letcher
Bark Camp Creek*	Mouth to Martins Fork	0.0-3.95	Whitley
Beaver Creek*	Mouth to Freeman Fork and Middle Fork	0.0-6.5	McCreary
Bee Lick Creek	Mouth to Unidentified Tributary	0.0-5.7	Pulaski
Brownies Creek*	Blacksnake Branch to Headwaters	0.0-16.0	Bell
Brush Creek	Wolf Creek to Reemergence of Sinking Creek	1.1-7.6	Rockcastle
Brushy Creek*	Mouth to Headwaters	0.0-16.0	Pulaski
Buck Creek*	Lake Cumberland Backwaters to Headwaters	5.0-62.6	Pulaski
Bunches Creek*	Mouth to Headwater	0.0-3.3	Whitley
Cane Creek*	Mouth to Headwaters	0.0-12.0	Laurel
Clifty Creek	Mouth to Rocky Branch	0.0-2.7	Pulaski
Cogur Fork*	Mouth to Headwaters	0.0-7.9	McCreary
Cumberland River	Wild River Boundaries	558.5-574.6	McCreary/ Whitley
Dog Slaughter Creek*	Mouth to North Fork and South Fork	0.0-1.1	Whitley
Eagle Creek*	Mouth to Headwaters	0.0-6.3	McCreary
Fugitt Creek*	Landuse Change to Headwaters	0.5-4.9	Harlan
Horse Lick Creek*	Mouth to Clover Bottom	0.0-12.3	Jackson
Howards Creek*	Dale Hollow Lake Backwaters to Headwaters	0.8-3.4	Clinton
Indian Creek*	Laurel fork to Barren Fork	2.3-6.7	McCreary
Jackie Branch*	Mouth to Headwaters	0.0-1.7	Whitley
Kilburn Fork	Mouth to Headwaters	0.0-6.3	McCreary
Laurel Creek	Mouth to Laurel Creek Dam	0.0-9.2	McCreary
Laurel Fork*	Tennessee Stateline to Tiny Branch/Pine Creek	4.2-13.0	Whitley
Laurel Fork*	Mouth to Headwaters	0.0-12.2	Jackson
Little South Fork of Cumberland	Mouth to Langham Branch	0.0-35.6	Wayne

224.70-110 mandate action taken by this administrative regulation.

4. Estimate the effect of this administrative regulation on the expenditures and revenues of a state or local government agency (including cities, counties, fire departments, or school districts) for the first full year the administrative regulation is to be in effect.

(a) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for the first year? This regulation will not generate any revenue.

(b) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for subsequent years? This regulation will not generate any revenue.

(c) How much will it cost to administer this program for the first year? There will be no cost to state or local agencies to implement this regulation.

(d) How much will it cost to administer this program for subsequent years? There will be no cost to state or local agencies to implement this regulation.

Note: If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-): Cannot be determined.

Expenditures (+/-): Cannot be determined.

Other Explanation: Wastewater treatment costs may increase for those local governments that will have new or expanded discharges into exceptional waters and high quality waters. Local governments withdrawing drinking water from these waters may have lower treatment costs, because these waters should have lower pollutant loads. The permit limitations imposed on new or expanded point source dischargers into water bodies could result in additional treatment outlays, training costs, and operational changes. New or expanded dischargers may incur costs of alternatives and pollution prevention analyses. Direct and indirect savings will be realized through reduced drinking water treatment costs, maintenance of good agricultural water, maintenance of fisheries, and healthy recreational waters. This requirement already exists in state and federal law. The amended administrative regulation does not create additional obligations for dischargers. This amended administrative regulation sets forth specific implementation procedures to comply with already existing antidegradation requirements. This administrative regulation allows regional publicly-owned treatment works to use their Regional Facility Plan (201 Planning Document) as an exception to compliance with the socioeconomic demonstration and alternatives analysis.

#### FEDERAL MANDATE ANALYSIS COMPARISON

1. Federal statute or regulation constituting the federal mandate. There is no federal statute or regulation mandating that Kentucky implement a water pollution control program. For Kentucky to maintain its delegation over the NPDES permit program, the Clean Water Act requires that Kentucky review its water quality standards every three years and comply with the programmatic requirements of 40 C.F.R. Part 131, including the requirement for implementing an antidegradation policy. The federal regulations require the adoption of an antidegradation policy for delegated states. The U.S. Environmental Protection Agency does provide guidance to the states, but individual decisions concerning the states' water quality programs are left to the states.

2. State compliance standards. 401 KAR 10:001, 10:026, 10:029, 10:030, and 10:031, the water quality standards regulations.

3. Minimum or uniform standards contained in the federal mandate. The Clean Water Act requires designated uses, criteria, standards and antidegradation policies in water quality standards.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements than those required by the federal mandate? No

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. There are no stricter standards or additional or different responsibilities or requirements.

through reduced drinking water treatment costs, maintenance of good agricultural water, maintenance of fisheries, and healthy recreational waters. Some communities and organizations have embraced streams in this category because it benefits the quality-of-life of the community. This positive quality of life value is difficult to estimate and has not been projected in this analysis.

(5) Provide an estimate of how much it will cost the administrative body to implement this administrative regulation:

(a) Initially: Given current budgetary limitations, additional workload will be absorbed within existing levels of funding and staffing. There are no initial costs to implement this regulation.

(b) On a continuing basis: The cabinet, in implementing the requirements of this amended administrative regulation, will internalize most associated costs with normal budget appropriations. Socioeconomic demonstrations will be reviewed and determinations made as to their adequacy. Costs may increase if the division's findings are contested.

(6) What is the source of the funding to be used for the implementation and enforcement of this administrative regulation? The source of revenue will be the General Fund and federal funds, as appropriated by the Kentucky General Assembly. The existing budget for the Division of Water utilizes approximately \$800,000 in general funds and approximately \$240,000 in federal funds to implement this regulation.

(7) Provide an assessment of whether an increase in fees or funding will be necessary to implement this administrative regulation, if new, or by the change if it is an amendment: Fees or funding increases are not anticipated to be necessary to the implementation of this amendment.

(8) State whether or not this administrative regulation established any fees or directly or indirectly increased any fees: This administrative regulation does not establish any fees nor directly or indirectly increase any fees.

(9) TIERING: Is tiering applied? Yes, tiering is used in this administrative regulation. The cabinet concluded that exceptional and high quality water receiving stormwater discharges covered by the KPDES general permits are protected under existing cabinet programs and do not require additional antidegradation review. Storm water discharges are considered to be short-term impacts and the vast majority do not receive numerical permit limits; however, they must comply with the best management practices and are inspected by the cabinet to ensure compliance. Coal mining discharge is not subject to additional antidegradation review in exceptional and high quality water. The cabinet's Section 402 KPDES permit process addresses the quality of discharges from permitted sediment ponds, not the methods of coal mining that are used or the location of the pond itself. Discharge limits are technology-based and are set by U.S. EPA and the cabinet for the coal mining industry. Fills in waters of the U.S. that are designated as outstanding state resource waters and cold water aquatic habitats will receive additional review by the cabinet under the Section 401 Water Quality Certification process. This review complements the Corps' 404 evaluation and is intended to insure that these waters and their aquatic resources are protected. Unavoidable impacts require compensatory mitigation to replace the lost aquatic stream functions using the Corps' Eastern Kentucky Stream Functional Assessment Protocol. No fills are permitted in streams designated as outstanding state resource water (OSRW). Coal mining is also subject to regulation under the Surface Mining Control and Reclamation Act. Domestic sewage discharge from a single-family residence is also not subject to additional antidegradation review in exceptional and high quality water if the cabinet deems that no feasible alternatives exist. The cabinet considers alternatives analysis for domestic sewage dischargers. Concentrated Animal Feeding Operations must already comply with a no discharge to waters of the Commonwealth permit; therefore, the cabinet concluded that Concentrated Animal Feeding Operations located next to excellent and high quality water are protected under existing cabinet programs and need not be subjected to additional antidegradation analysis. Operations that expand by less than twenty percent over currently permitted pollutant loadings are not subject to further antidegradation analysis. This is consistent with the existing requirements of this administrative regulation. The cabinet shall assure water quality necessary to fully protect existing uses. The cabinet concluded that the approval of a POTW's regional facility plan pursuant to 401 KAR 5:006 (201 Planning Document) will demonstrate compliance with the alternatives analysis and socioeconomic demonstration.

#### FISCAL NOTE ON STATE OR LOCAL GOVERNMENT

1. Does this administrative regulation relate to any program, service, or requirements of a state or local government (including cities, counties, fire departments, or school districts)? Yes

2. What units, parts or divisions of state or local government (including cities, counties, fire departments, or school districts) will be impacted by this administrative regulation? This amended administrative regulation may affect the wastewater treatment divisions of local government if they will have new or expanded discharges into outstanding national resource waters, exceptional waters, or high quality waters.

3. Identify each state or federal statute or federal regulation that requires or authorizes the action taken by the administrative regulation. This amended administrative regulation relates to local governments' wastewater treatment service. KRS 224.10-100, 224.70-100, and



criteria, lists many surface waters assigned to specific categories, and provides for recategorization of water.

(b) The necessity of this administrative regulation: This administrative regulation is necessary to manage water resources and to provide for the prevention, abatement, and control of water pollution.

(c) How this administrative regulation conforms to the content of the authorizing statutes: This administrative regulation conforms to KRS 224.10-100, which requires the cabinet to develop and conduct a comprehensive program for the management of water resources and to provide for the prevention, abatement, and control of water pollution. KRS 224.70-100 declares that the policy of the Commonwealth is to conserve its waters for legitimate uses and to: safeguard from pollution the uncontaminated waters of the Commonwealth, prevent the creation of any new pollution in the waters of the Commonwealth, and abate any existing pollution. This administrative regulation and 401 KAR 10:001, 10:026, 10:029, and 10:031 establish procedures to protect the surface waters of the Commonwealth, and thus manage water resources and prevent water pollution. This administrative regulation establishes a methodology to implement the antidegradation policy contained in 401 KAR 10:029 by establishing procedures to control point source water pollution in waters affected by that policy.

(d) How this administrative regulation currently assists or will assist in the effective administration of the statutes: This administrative regulation will assist in the administration of the statutes by implementing the antidegradation policy for the protection of surface waters of the Commonwealth as required by the authorizing statutes.

(2) If this is an amendment to an existing administrative regulation, provide a brief summary of:

(a) How the amendment will change this existing administrative regulation: This amendment includes another 38 stream segments totaling 118 miles of surface waters newly categorized as exceptional water as a result of routine watershed monitoring and investigations of potential waters affected by permitted activities since the previous revisions to the regulations in 2004.

(b) The necessity of the amendment to this administrative regulation: This amendment is necessary to add waters that have been found to meet the criteria for Exceptional water since the previous revisions.

(c) How the amendment conforms to the content of the authorizing statutes: This amendment conforms to KRS 224.10-100, which requires the Environmental and Public Protection Cabinet to develop and conduct a comprehensive program for the management of water resources and to provide for the prevention, abatement, and control of water pollution. KRS 224.70-100 declares that the policy of the Commonwealth is to conserve its waters for legitimate uses and to: safeguard from pollution the uncontaminated waters of the Commonwealth, prevent the creation of any new pollution in the waters of the Commonwealth, and abate any existing pollution. This amendment establishes procedures to protect the surface waters of the Commonwealth, and thus protect water resources. This amendment establishes a methodology to implement the antidegradation policy contained in 401 KAR 10:029 by establishing procedures to control point source water pollution in waters affected by that policy.

(d) How the amendment will assist in the effective administration of the statutes: This amendment will assist in the administration of the statutes by listing surface waters newly categorized as exceptional water and adding a qualifying criterion for waters in the Impaired Water category.

(3) List the type and number of individuals, businesses, organizations, or state and local governments affected by this administrative regulation: This administrative regulation includes 38 surface waters newly categorized as exceptional waters. Individuals, businesses, organizations, and governments that will have new or expanded wastewater discharges into streams categorized as exceptional water or high quality water could be affected by either stricter discharge limitations or an alternatives analysis and socioeconomic demonstration.

(4) Provide an analysis of how the entities identified in question (3) will be impacted by either the implementation of this administrative regulation, if new, or by the change, if it is an amendment, including:

(a) List the actions that each of the regulated entities identified in question (3) will have to take to comply with this administrative regulation or amendment: The permit limitations imposed on new or expanded point source dischargers into water bodies could result in additional treatment outlays, training costs, and operational changes. New or expanded point source dischargers covered under the Section 402 KPDES permit system may incur costs of alternatives and pollution prevention and socioeconomic analyses. This requirement already exists in state and federal law. This amended administrative regulation sets forth specific implementation procedures to comply with existing antidegradation requirements.

(b) In complying with this administrative regulation or amendment, how much will it cost each of the entities identified in question (3): The costs to comply with this administrative regulation will vary considerably depending on the site location, the type of activity occurring, and other factors. Therefore, it is not possible to determine quantitative costs to implement this regulation. The 38 new Exceptional waters are almost exclusively in more undeveloped areas and the effect of including them in regulation under this antidegradation category should be minimal for local economies. The provisions in the antidegradation regulation apply only to new and expanded discharges.

(c) As a result of compliance, what benefits will accrue to the entities identified in question (3): Direct and indirect savings will be realized

3. Descriptions of general land uses and specific land uses adjacent to the surface water for which the recategorization is proposed;
  4. The existing and designated uses of the water upstream and downstream of the proposed recategorized water;
  5. General physical characteristics of the surface water including width, depth, bottom composition, and slope;
  6. The frequency of occasions when there is no natural flow in the surface water[;] and the 7Q<sub>10</sub> and harmonic mean flow values for the surface water and adjacent surface waters;
  7. An assessment of the existing and potential aquatic life habitat in the surface water under consideration and the adjacent upstream surface waters. The existing aquatic life shall be documented including the occurrence of individuals or populations, indices of diversity and well-being, and abundance of species of any unique native biota;
  8. A documented rationale as to why the water qualify for the recategorization; and
  9. The rationale used to support the national significance of the water.
- (b) A petition for exceptional water shall include the following:
1. A United States Geological Survey 7.5 minute topographic map or its equivalent ~~[as approved by the cabinet]~~ showing the surface water to be recategorized including a description consisting of a river mile index with existing and proposed discharge points;
  2. Descriptions of general land uses, including:
    - a. Mining;
    - b. Agriculture;
    - c. Recreation;
    - d. Low, medium, and high density residential, commercial, or industrial uses; and
    - e. ~~[mining, agricultural, recreational, low, medium, and high density residential, commercial, and industrial, and]~~ Specific land uses adjacent to the surface water for which the recategorization is proposed;
  3. The frequency of occasions when there is no natural flow in the surface water[;] and the 7Q<sub>10</sub> and annual mean flow values for the surface water; and
  4. Fish or benthic macroinvertebrate collection data and an Index of Biotic Integrity or Macroinvertebrate Bioassessment Index calculation from a waterbody if criteria specified in Section 1(2)(a)3 of this administrative regulation are utilized.

Section 3. Incorporation by Reference. (1) The following material is incorporated by reference:

- (a) "Development and Application of the Kentucky Index of Biotic Integrity (KIBI)", 2003, Kentucky Division of Water, Environmental and Public Protection Cabinet;
  - (b) "The Kentucky Macroinvertebrate Bioassessment Index", 2003, Kentucky Division of Water, Environmental and Public Protection Cabinet;
  - (c) "Interim Economic Guidance for Water Quality Standards Workbook", EPA, March 1995 Publication EPA-823-B-95-002, U.S. Environmental Protection Agency, Office of Water, Washington, D.C.; and
  - (d) "401 KAR 5:030 Antidegradation Implementation Procedures Process Flow Chart", May 25, 2004, KPDES Branch, Kentucky Division of Water, Kentucky Department for Environmental Protection.
- (2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Division of Water, 200 Fair Oaks Lane ~~[14 Reilly Road]~~, Frankfort, Kentucky, Monday through Friday, 8 a.m. to 4:30 p.m.

LEONARD K. PETERS, Secretary

APPROVED BY AGENCY: September 11, 2008

FILED WITH LRC: September 12, 2008 at noon

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REGULATORY IMPACT ANALYSIS AND TIERING STATEMENT

Contact Person: Sandy Gruzsky

(1) Provide a brief summary of:

(a) What this administrative regulation does: This administrative regulation implements the antidegradation policy of 401 KAR 10:029 by establishing procedures to control water pollution in waters affected by that policy. This administrative regulation provides categorization

(viii)~~[h-]~~ The increase or avoidance of a decrease in employment;

(ix)~~[i-]~~ The increase in production level;

(x)~~[j-]~~ The increase in operational efficiency;

(xi)~~[k-]~~ Industrial or commercial benefit to the community; and

(xii)~~[l-]~~ Any other economic or social benefit to the community.

6. A permit applicant who has failed to demonstrate ~~[to the satisfaction of the cabinet]~~ the necessity for lowering water quality shall meet the effluent limitations required by this paragraph and additional requirements of the Kentucky Pollution Discharge Elimination System program, 401 KAR 5:050-5:080.

7. A permit applicant who demonstrates ~~[to the satisfaction of the cabinet]~~ the necessity for lowering water quality shall meet the water quality based limitations as outlined in 401 KAR 10:031~~[401 KAR 5:034]~~.

(4) Impaired water.

(a) Categorization criteria. A surface water categorized as impaired for applicable designated uses shall be a water identified pursuant to 33 U.S.C. 1315 ~~[or designated pursuant to 401 KAR 10:026, Section 1, with a use of Modified Warm Water Aquatic Habitat]~~.

1. Surface water categorized as impaired shall be assessed by the cabinet as not fully supporting any applicable designated uses.

2. A surface water shall not be categorized as impaired water if the surface water is listed as an outstanding state resource water in 401 KAR 10:026~~[401 KAR 5:026]~~.

(b) Implementation procedure.

1. All existing uses shall be protected and the level of water quality necessary to protect those existing uses shall be assured in impaired water.

2. The process to allow a discharge into an impaired water and to assure protection of the water shall be~~[is]~~ regulated by the requirements in the Kentucky Pollution Discharge Elimination System Program, 401 KAR 5:050-5:080.

Section 2. Procedure for Recategorizing Water. This section shall apply to the recategorization of surface water to outstanding national resource water and exceptional water. The redesignation of water to outstanding state resource water shall be governed by the procedures in 401 KAR 10:026~~[401 KAR 5:026]~~.

(1) The cabinet may propose to recategorize certain water to outstanding national resource water and exceptional water if the water meets the criteria set forth in Section 1(1)(a) or (2)(a) of this administrative regulation.

(a) If the cabinet proposes to recategorize these waters, it shall provide notice and an opportunity for public hearing.

(b) The cabinet shall provide the documentation requirements of this section for those surface waters it proposes to recategorize.

(2) A person may request recategorization of a surface water to an outstanding national resource water or exceptional water by filing a petition with the cabinet.

(a) The petition shall include the name and address of the petitioner and the information and documentation necessary to recategorize the particular water as required by subsection (4) of this section.~~[:]~~

(b) The petitioner shall have the burden of proof that the recategorization is appropriate.

(c) The cabinet shall provide notice of the petition and an opportunity for a public hearing.

(d) The cabinet shall review the petition, supporting documentation, and any comments received from the public to determine if the proposed water qualifies for recategorization.

(e) The cabinet shall document the determination to grant or deny recategorization as a result of a petition, and shall provide a copy of the decision to the petitioner and other interested parties.

(3) If a water is to be recategorized, the cabinet shall publish notice of the recategorization.

(a) A~~[Any]~~ permit issued after the date of publication shall be issued with limitations based on the new category.

(b) When the cabinet reviews its water quality standards pursuant to the provisions of Section 303 of the Clean Water Act, 33 U.S.C. 1313, the cabinet shall propose to have all recategorized water promulgated as an amendment to this administrative regulation.

(4) The following information, documentation, and data shall support a petition for recategorization:

(a) A petition for outstanding national resource water shall include:

1. A United States Geological Survey 7.5 minute topographic map or its equivalent ~~[as approved by the cabinet]~~ showing those surface waters to be recategorized including a description consisting of a river mile index with any existing and proposed discharge points;

2. Existing uses and water quality data for the surface water for which the recategorization is proposed. If adequate data are unavailable, additional studies shall~~[may]~~ be required by the cabinet;

subsection 4(a) of this section.

2. A surface water shall be categorized as a high quality water if the surface water is listed as an outstanding state resource water in 401 KAR 10:026~~[401 KAR 5:026]~~ and is not listed as an outstanding national resource water or an exceptional water in Table 1 or 2 of this section.

(b) Implementation procedure. KPDES permit applications for discharges into high quality water received after U.S. EPA approval of this subsection shall comply with this paragraph.

1. Dischargers listed in clauses a through e of this subparagraph shall be~~are~~ subject to control by existing cabinet programs including the Kentucky Pollution Discharge Elimination System program, 401 KAR 5:050-5:080. Subparagraphs 2 through 6 of this paragraph shall not apply to those dischargers identified in clauses a through e of this paragraph, except the cabinet shall assure water quality necessary to fully protect existing uses.

- a. KPDES general permits for storm water discharge;
- b. Coal mining discharge subject to regulation under the Surface Mining Control and Reclamation Act, 30 U.S.C. 1201-1328~~[et seq.]~~, and 33 U.S.C. 1344;
- c. Domestic sewage discharge from a single-family residence;
- d. Concentrated animal feeding operations; and
- e. KPDES permit renewals and modifications that result in less than a twenty (20) percent increase in pollutant loading from the previously permitted pollutant loading.

2. Except as provided in subparagraph 5 of this paragraph, a KPDES permit for a new domestic sewage discharger or expanded domestic sewage discharge into high quality water shall contain effluent limitations for the entire effluent and shall have an effluent quality of:

- a. Not~~[No]~~ greater than ten (10) mg/l five (5) day carbonaceous biochemical oxygen demand;
- b. Not~~[No]~~ greater than two (2) mg/l ammonia-nitrogen;
- c. Not~~[No]~~ greater than 0.010 mg/l total residual chlorine;
- d. Not~~[No]~~ greater than ten(10) mg/l total suspended solids;
- e. Not~~[No]~~ greater than one (1) mg/l total phosphorous;
- f. A minimum of seven (7) mg/l dissolved oxygen; and
- g. The geometric mean~~[An arithmetic mean value]~~ for fecal coliform bacteria shall not ~~[to]~~ exceed 200 colonies per 100 milliliters during a period of thirty (30) consecutive days or 400 colonies per 100 milliliters during a period of seven (7) consecutive days, or the geometric~~an arithmetic~~ mean for Escherichia coli bacteria shall not ~~[to]~~ exceed 130 colonies per 100 milliliters during a period of thirty (30) consecutive days or 230 colonies per 100 milliliters during a period of seven (7) consecutive days.

3. Except as provided in subparagraph 5 of this paragraph, a KPDES permit for a new nondomestic discharger or an expanded nondomestic discharge into high quality water shall be restricted to not~~[no]~~ more than one-half (1/2) of the water quality based limitations that would have been permitted at standard design conditions.

4. If the permit applicant accepts the effluent limitations required by subparagraphs 2 and 3 of this paragraph, the KPDES permit shall be issued with these effluent limitations and any additional requirements of the Kentucky Pollution Discharge Elimination System program, 401 KAR 5:050-5:080, without further antidegradation review.

5. If the permit applicant does not accept the effluent limitations required by subparagraphs 2 and 3 of this paragraph, the applicant may request water quality based limitations permitted at standard design conditions.

a. In making this request, the applicant shall demonstrate ~~[to the satisfaction of the cabinet]~~ that ~~[no]~~ technologically or economically feasible alternatives do not exist and that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the water is located.

b. ~~[For purposes of this administrative regulation,]~~ The approval of a POTW's regional facility plan pursuant to 401 KAR 5:006 shall demonstrate compliance with the alternatives analysis and socioeconomic demonstration for a regional facility.

c. The alternatives analysis and socioeconomic demonstration shall consider the following:

- (i)~~[a-]~~ Discharge to other treatment facilities;
- (ii)~~[b-]~~ Use of other discharge locations;
- (iii)~~[c-]~~ Water reuse or recycle;
- (iv)~~[d-]~~ Process and treatment alternatives;
- (v)~~[e-]~~ On-site or sub-surface disposal;
- (vi)~~[f-]~~ Any other examination of alternatives to lowering water quality to which the cabinet and the applicant can agree;
- (vii)~~[g-]~~ The positive or beneficial effect of the facility on an existing environmental or public health problem;

2. Zones of initial dilution shall be ~~are~~ prohibited in exceptional water unless assigned before December 12, 1999 ~~[the effective date of this administrative regulation]~~.

3. Except as provided in subparagraph 7 of this paragraph, a KPDES permit for a new discharger or expanded discharge into exceptional water shall contain effluent limitations for the entire effluent and shall have an effluent quality of:

- a. A chronic whole effluent toxicity limitation shall apply unless an acute whole effluent toxicity limitation is more stringent; and
- b. Chloride limitations shall be based on the domestic water supply criterion of 250 mg/l.

4. Except as provided in subparagraph 7 of this paragraph, a KPDES permit for a new domestic sewage discharger or expanded domestic sewage discharge permitted after July 12, 1995 into exceptional water shall contain effluent limitations for the entire effluent and shall have an effluent quality of:

- a. ~~Not[No]~~ greater than ten (10) mg/l five (5) day carbonaceous biochemical oxygen demand;
- b. ~~Not[No]~~ greater than two (2) mg/l ammonia-nitrogen;
- c. ~~Not[No]~~ greater than 0.010 mg/l total residual chlorine;
- d. ~~Not[No]~~ greater than ten (10) mg/l total suspended solids;
- e. ~~Not[No]~~ greater than one (1) mg/l total phosphorous;
- f. A minimum of seven (7) mg/l dissolved oxygen;
- g. The geometric mean ~~[An arithmetic mean value]~~ for fecal coliform bacteria shall not ~~[to]~~ exceed 200 colonies per 100 milliliters during a period of thirty (30) consecutive days or 400 colonies per 100 milliliters during a period of seven (7) consecutive days, or the geometric ~~[an arithmetic]~~ mean for Escherichia coli bacteria shall not ~~[to]~~ exceed 130 colonies per 100 milliliters during a period of thirty (30) consecutive days or 230 colonies per 100 milliliters during a period of seven (7) consecutive days; and
- h. The discharge shall not cause the average instream dissolved oxygen concentration to be less than six and zero-tenths (6.0) mg/l.

5. Except as provided in subparagraph (7) of this paragraph, a KPDES permit for a new nondomestic discharger or an expanded nondomestic discharge permitted after July 12, 1995 into exceptional water shall be restricted to ~~not[no]~~ more than one-half (1/2) of the water quality based limitations that would have been permitted at standard design conditions.

6. If the permit applicant accepts the effluent limitations required by subparagraphs 3, 4, and 5 of this paragraph, the KPDES permit shall be issued with these effluent limitations and additional requirements of the Kentucky Pollution Discharge Elimination System program, 401 KAR 5:050-5:080, without further antidegradation review.

7. If the permit applicant does not accept the effluent limitations required by subparagraphs 3, 4, and 5 of this paragraph, the applicant shall demonstrate ~~[to the satisfaction of the cabinet]~~ that ~~[no]~~ technologically or economically feasible alternatives do not exist and that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the water is located.

a. For purposes of this administrative regulation, the approval of a POTWs regional facility plan pursuant to 401 KRS 5:006 shall demonstrate compliance with the alternatives analysis and socioeconomic demonstration for a regional facility.

b. The alternatives analysis and socioeconomic demonstration shall follow the guidelines in ~~[4]~~ Interim Economic Guidance for Water Quality Standards Workbook~~[1]~~, EPA, March 1995 ~~[incorporated by reference in Section 3 of this administrative regulation]~~.

c. The alternatives analysis shall consider the following:

- (i) ~~[a-]~~ Discharge to other treatment facilities;
- (ii) ~~[b-]~~ Use of other discharge locations;
- (iii) ~~[c-]~~ Water reuse or recycle;
- (iv) ~~[d-]~~ Process and treatment alternatives;
- (v) ~~[e-]~~ On-site or subsurface disposal; and
- (vi) ~~[f-]~~ Any other examination of alternatives to lowering water quality to which the cabinet and the applicant can agree.

8. A permit applicant who has failed to demonstrate ~~[to the satisfaction of the cabinet]~~ the necessity for lowering water quality shall meet the effluent limitations required by this paragraph and additional requirements of the Kentucky Pollution Discharge Elimination System program, 401 KAR 5:050-5:080.

9. A permit applicant who demonstrates ~~[to the satisfaction of the cabinet]~~ the necessity for lowering water quality shall meet the water quality based limitations as outlined in 401 KAR 10:031 ~~[401 KAR 5:031]~~.

- (3) High quality water.
- (a) Categorization criteria.

1. A surface water shall be categorized as high quality water if the surface water is not listed as an outstanding national resource water or an exceptional water in Table 1 or 2 of this section and if the surface water does not meet the criteria for impaired water as provided for in

River*			
Marsh Creek*	Laurel Creek to Headwaters	8.6-26.2	McCreary
Martins Fork of Cumberland River	Wild River Boundaries	27.4-31.3	Harlan
McFarland Creek	Little McFarland Creek to Spring Branch	0.8-6.2	Monroe
Meshack Creek	Mouth to Headwaters	0.0-2.8	Monroe
Middle Fork Rockcastle River*	Mouth to Horse Lick Creek	0.0-7.8	Jackson
Mud Camp Creek*	Mouth to Collins Branch	0.0-1.3	Cumberland
Mud Camp Creek*	Unidentified Tributary to Headwaters	3.7-8.4	Monroe/Cumberland
Otter Creek	Lake Cumberland Backwaters to Carpenter Fork	14.5-22.0	Wayne
Poor Fork Cumberland River*	Franks Creek to Headwaters	46.1-51.7	Letcher
Presley House Branch*	Mouth to Headwaters	0.0-1.5	Letcher
Puncheoncamp Branch*	Mouth to Headwaters	0.0-1.0	McCreary
Reek Creek*	White Oak Creek to Tennessee Stateline	4.1-21.0	McCreary
Reek Creek Unidentified Tributary*	Mouth to Headwaters	0.0-1.0	McCreary
Reek Creek Unidentified Tributary*	Mouth to Headwaters	0.0-1.15	McCreary
Rockcastle River	Wild River Boundaries	8.5-24.4	Laurel/ Pulaski
Shillalah Creek*	Mouth to Headwaters	0.0-5.5	Bell
Sinking Creek*	Mouth to White Oak Creek	0.0-0.8	Laurel
Sulphur Creek*	Dale Hollow Backwaters to Headwaters	2.0-5.1	Clinton
South Fork of Dog Slaughter Creek*	Mouth to Headwaters	0.0-4.6	Whitley
South Fork Rockcastle River	Mouth to White Oak Creek	0.0-5.6	Laurel
Watts Branch*	Mouth to Headwaters	0.0-2.6	McCreary
Watts Creek*	Lake to Headwaters	2.2-4.3	Harlan]

\*Waterbodies in the cabinet's reference reach network

(a) Categorization criteria. A surface water shall be categorized as an exceptional water if any of the following criteria are met:

1. Surface water is designated as a Kentucky Wild River and is not categorized as an outstanding national resource water;
2. Surface water is designated as an outstanding state resource water as set forth in 401 KAR 10:031~~[401 KAR 5:034]~~, Section 8(1)(a)1, 2, and 3 and Section 8(1)(b);
3. Surface water contains either of the following:
  - a. A fish community that is rated "excellent" by the use of the Index of Biotic Integrity included in ~~[""]~~Development and Application of the Kentucky Index of Biotic Integrity (KIBI)~~[""]~~, 2003~~[-incorporated by reference in Section 3 of this administrative regulation];~~ or
  - b. A macroinvertebrate community that is rated "excellent" by the Macroinvertebrate Bioassessment Index included in "The Kentucky Macroinvertebrate Bioassessment Index," 2003~~[-incorporated by reference in Section 3 of this administrative regulation];~~ or
4. Surface water in the cabinet's reference reach network.

(b) Implementation procedure.

1. Dischargers listed in clauses a through e of this subparagraph shall be~~are~~ subject to control by existing cabinet programs including the Kentucky Pollution Discharge Elimination System program, 401 KAR 5:050-5:080. Subparagraphs 2 through 9 of this paragraph shall not apply to those dischargers identified in clauses a through e of this paragraph, except the cabinet shall assure water quality necessary to fully protect existing uses.

- a. ~~[""]~~KPDES general permits for~~[""]~~ storm water discharge;
- b. Coal mining discharge subject to regulation under the Surface Mining Control and Reclamation Act 30 U.S.C. 1201-1328 and 33 U.S.C. 1344;
- c. Domestic sewage discharge from a single-family residence;
- d. Concentrated animal feeding operations; and
- e. KPDES permit renewals and modifications that result in less than a twenty (20) percent increase in pollutant loading from the previously permitted pollutant loading.

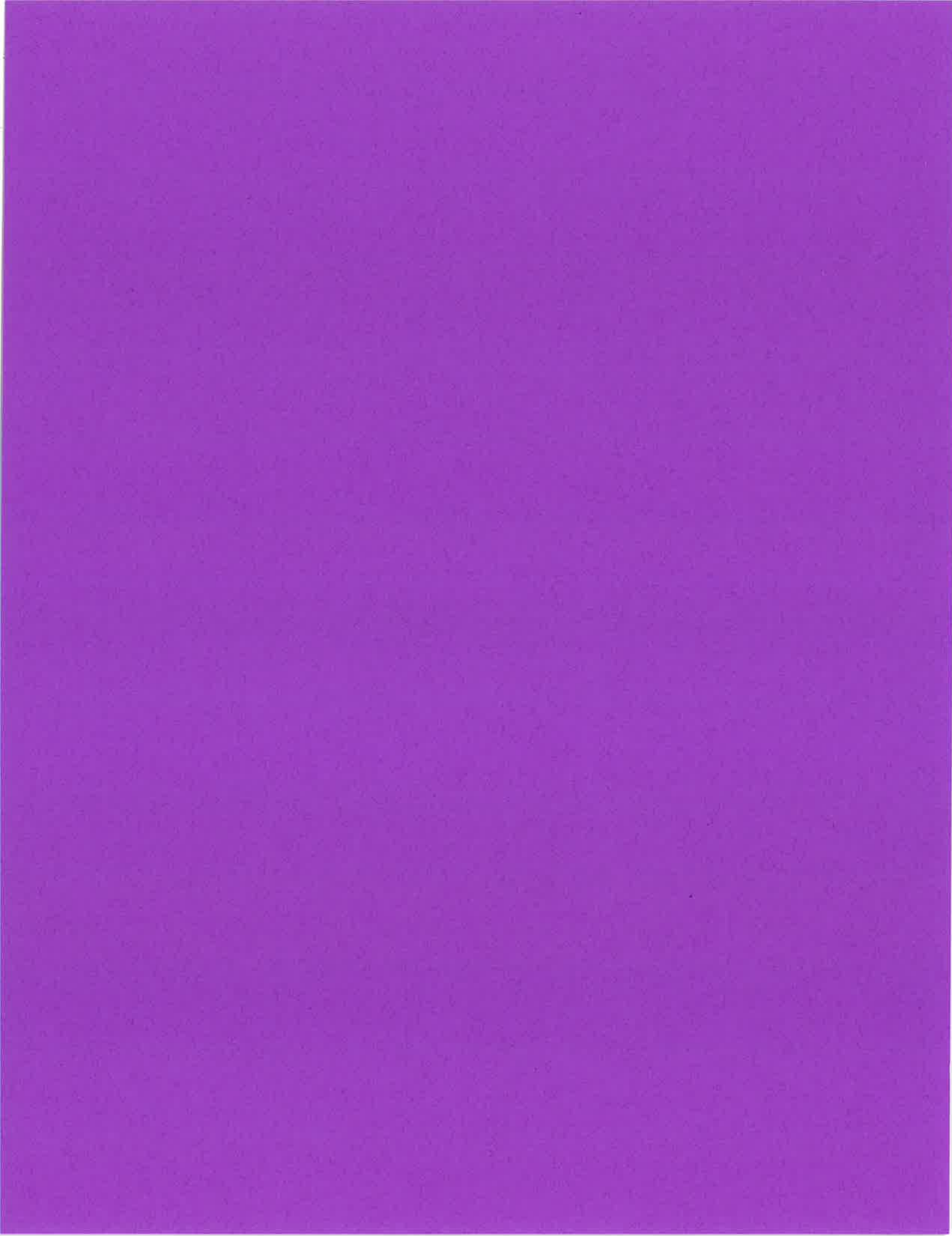
The first part of the paper discusses the importance of the study of the history of the English language. It is a branch of linguistics which deals with the changes in the language over time. The study of the history of the English language is important for many reasons. It helps us to understand the development of the language and the influence of other languages on it. It also helps us to understand the social and cultural changes that have taken place in the English-speaking world.

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ENVIRONMENTAL AND PUBLIC PROTECTION CABINET  
 Department for Environmental Protection  
 Division of Water  
 (Amended After Comments)

**401 KAR 10:031. Surface water standards.**

RELATES TO: KRS 146.200-146.360, 146.410-146.535, 146.550-146.570, 146.600-146.619, 146.990, 224.01-010, 224.01-400, 224.16-050, 224.16-070, 224.70-100-224.70-140, 224.71-100-224.71-145, 224.73-100-224.73-120, **EO 2008-507, 2008-531**

STATUTORY AUTHORITY: KRS 146.220, 146.241, 146.270, 146.410, 146.450, 146.460, 146.465, 224.10-100, 224.16-050, 224.16-060, 224.70-100, 224.70-110, 40 C.F.R. Part 131, 16 U.S.C. 1271-1287~~[(et seq.)]~~, 1531-1544~~[(et seq.)]~~, 33 U.S.C. 1311, 1313, 1314, 1341

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the ~~Environmental and Public Protection~~ cabinet to develop and conduct a comprehensive program for the management of water resources and to provide for the prevention, abatement, and control of water pollution. **EO 2008-507 and 2008-531, effective June 16, 2008, abolish the Environmental and Public Protection Cabinet and establish the new Energy and Environment Cabinet.** This administrative regulation and 401 KAR 10:001, 10:026, 10:029, and 10:030 ~~[5:002, 5:026, 5:029, and 5:030]~~ establish procedures to protect the surface waters of the commonwealth, and thus protect water resources. This administrative regulation establishes water quality standards ~~that~~~~[which]~~ consist of designated legitimate uses of the surface waters of the commonwealth and the associated water quality criteria necessary to protect those uses. These water quality standards are minimum requirements that apply to all surface waters in the commonwealth of Kentucky in order to maintain and protect them for designated uses. These water quality standards are subject to periodic review and revision in accordance with ~~the Clean Water Act, 33 U.S.C. 1251-1387, 40 C.F.R. [Part] 131, and KRS Chapter 224 [federal and state laws].~~

Section 1. Nutrient Limits. In lakes and reservoirs and their tributaries, and other surface waters where eutrophication problems may exist, nitrogen, phosphorus, carbon, and contributing trace element discharges shall be limited in accordance with:

- (1) The scope of the problem;
- (2) The geography of the affected area; and
- (3) Relative contributions from existing and proposed sources.

Section 2. Minimum Criteria Applicable to All Surface Waters. (1) The following minimum water quality criteria ~~shall be~~~~are~~ applicable to all surface waters including mixing zones, with the exception that toxicity to aquatic life in mixing zones shall be subject to the provisions of 401 KAR 10:029~~[5:029]~~, Section 4. Surface waters shall not be aesthetically or otherwise degraded by substances that:

- (a) Settle to form objectionable deposits;
- (b) Float as debris, scum, oil, or other matter to form a nuisance;
- (c) Produce objectionable color, odor, taste, or turbidity;
- (d) Injure, are chronically or acutely toxic to or produce adverse physiological or behavioral responses in humans, animals, ~~or~~ fish and other aquatic life;
- (e) Produce undesirable aquatic life or result in the dominance of nuisance species;
- (f) ~~1. Cause fish flesh tainting.~~

**2. The concentration of phenol shall not exceed 300 µg/l as an instream value.** ~~[The concentration of all phenolic compounds which cause fish flesh tainting shall not exceed five (5) µg/l as an instream value;~~

(g) Cause the following changes in radionuclides:

- ~~1. The gross total alpha particle activity, including radium 226 but excluding radon and uranium, to exceed fifteen (15) pCi/l;~~
- ~~2. Combined radium 226 and radium 228 to exceed five (5) pCi/l. Specific determinations of radium 226 and radium 228 are not necessary if dissolved gross alpha particle activity does not exceed five (5) pCi/l;~~
- ~~3. The concentration of total gross beta particle activity to exceed fifty (50) pCi/l;~~
- ~~4. The concentration of tritium to exceed 20,000 pCi/l;~~
- ~~5. The concentration of total Strontium 90 to exceed eight (8) pCi/l;~~
- ~~6. The concentration of uranium to exceed thirty (30) µg/l;~~

(2) The water quality criteria for the protection of human health related to fish consumption in Table 1 of Section 6 of this administrative

regulation are applicable to all surface water at the edge of the assigned mixing zones except for those points where water is withdrawn for domestic water supply use.

(a) The criteria are established to protect human health from the consumption of fish tissue, and shall not be exceeded.

(b) For those substances associated with a cancer risk, an acceptable risk level of not[no] more than one (1) additional cancer case in a population of 1,000,000 people, or  $1 \times 10^{-6}$  shall be utilized to establish the allowable concentration.

Section 3. Use Designations and Associated Criteria. (1) Surface waters may be designated as having one (1) or more legitimate uses and associated criteria protective of those uses. Those uses are listed in 401 KAR 10:026[5-026]. Nothing in this administrative regulation shall be construed to prohibit or impair the legitimate beneficial uses of these waters. The criteria in Sections 2, 4, 6, and 7 of this administrative regulation represent minimum conditions necessary to:

(a) Protect surface waters for the indicated use; and

(b) Protect human health from fish consumption.

(2) On occasion, surface water quality may be outside of the limits established to protect designated uses because of natural conditions. If this occurs during periods when stream flows are below the flow that is used by the cabinet to establish effluent limitations for wastewater treatment facilities, a discharger shall not be considered a contributor to instream violations of water quality standards, if treatment results in compliance with permit requirements.

(3) Stream flows for water quality-based permits. The following stream flows shall be utilized if deriving KPDES permit limitations to protect surface waters for the listed uses and purposes:

(a) Aquatic life protection shall be  $7Q_{10}$ ;

(b) Water-based recreation protection shall be  $7Q_{10}$ ;

(c) Domestic water supply protection shall be determined at points of withdrawal as:

1. The harmonic mean for cancer-linked substances; and

2.  $7Q_{10}$  for noncancer-linked substances;

(d) Human health protection from fish consumption and for changes in radionuclides shall be the harmonic mean; and

(e) Protection of aesthetics shall be  $7Q_{10}$ .

Section 4. Aquatic Life. (1) Warm water aquatic habitat. The following parameters and associated criteria shall apply for the protection of productive warm water aquatic communities, fowl, animal wildlife, arboreal growth, agricultural, and industrial uses:

(a) Natural alkalinity as  $\text{CaCO}_3$  shall not be reduced by more than twenty-five (25) percent.

1. If natural alkalinity is below twenty (20) mg/l  $\text{CaCO}_3$ , there shall not be a reduction below the natural level.

2. Alkalinity shall not be reduced or increased to a degree that[which] may adversely affect the aquatic community;[-]

(b) pH shall not be less than six and zero-tenths (6.0) nor more than nine and zero-tenths (9.0) and shall not fluctuate more than one and zero-tenths (1.0) pH unit over a period of twenty-four (24) hours;[-]

(c) Flow shall not be altered to a degree that[which] will adversely affect the aquatic community;[-]

(d) Temperature shall not exceed thirty-one and seven-tenths (31.7) degrees Celsius (eighty-nine (89) degrees Fahrenheit).

1. The normal daily and seasonal temperature fluctuations that existed before the addition of heat due to other than natural causes shall be maintained.

2. The cabinet may determine allowable surface water temperatures on a site-specific basis utilizing available data that[which] shall be based on the effects of temperature on the aquatic biota that [which] utilize specific surface waters of the commonwealth and that[which] may be affected by person-induced temperature changes.

a. Effects on downstream uses shall[will] also be considered in determining site-specific temperatures.

b. Values in the following table are guidelines for surface water temperature.

Month/Date	Period Average		Instantaneous Maximum	
	(°F)	(°C)	(°F)	(°C)
January 1-31	45	7	50	10
February 1-29	45	7	50	10
March 1-15	51	11	56	13

March 16-31	54	12	59	15
April 1-15	58	14	64	18
April 16-30	64	18	69	21
May 1-15	68	20	73	23
May 16-31	75	24	80	27
June 1-15	80	27	85	29
June 16-30	83	28	87	31
July 1-31	84	29	89	32
August 1-31	84	29	89	32
September 1-15	84	29	87	31
September 16-30	82	28	86	30
October 1-15	77	25	82	28
October 16-31	72	22	77	25
November 1-30	67	19	72	22
December 1-31	52	11	57	14

3. A successful demonstration concerning thermal discharge limits carried out under Section 316(a) of the Clean Water Act, **33 U.S.C. 1326**, shall constitute compliance with the temperature requirements of this subsection. A successful demonstration assures the protection and propagation of a balanced indigenous population of shellfish, fish and wildlife in or on the water into which the discharge is made;[-]

(e) Dissolved oxygen.

1. a. Dissolved oxygen shall be maintained at a minimum concentration of five and zero-tenths (5.0) mg/l as a twenty-four (24) hour average in water with WAH use~~(daily average);~~

b. The instantaneous minimum shall not be less than four and zero-tenths (4.0) mg/l in water with WAH use and five and zero-tenths (5.0) mg/l in water with OSRW use.

2. The dissolved oxygen concentration shall be measured at middepth in waters having a total depth of ten (10) feet or less and at representative depths in other waters;[-]

(f) Total dissolved solids or specific conductance. Total dissolved solids or specific conductance shall not be changed to the extent that the indigenous aquatic community is adversely affected;[-]

(g) Total suspended solids. Total suspended solids shall not be changed to the extent that the indigenous aquatic community is adversely affected;[-]

(h) Settleable solids. The addition of settleable solids that may alter the stream bottom so as to adversely affect productive aquatic communities shall be ~~is~~ prohibited;[-]

(i) Ammonia. The concentration of the un-ionized form shall not be greater than 0.05 mg/l at any time instream after mixing. Un-ionized ammonia shall be determined from values for total ammonia-N, in mg/l, pH and temperature, by means of the following equation:

$$Y = 1.2 (\text{Total ammonia-N}) / (1 + 10^{\text{pK}_a - \text{pH}})$$

$$\text{pK}_a = 0.0902 + (2730 / (273.2 + T_c))$$

Where:

$T_c$  = temperature, degrees Celsius.

Y = un-ionized ammonia (mg/l);[-]

(j) Toxics.

1. The allowable instream concentration of toxic substances, or whole effluents containing toxic substances, which are noncumulative or nonpersistent with a half-life of less than ninety-six (96) hours, shall not exceed:

a. One-tenth (0.1) of the ninety-six (96) hour median lethal concentration ( $LC_{50}$ ) of representative indigenous or indicator aquatic organisms; or

b. A chronic toxicity unit of 1.00 utilizing the twenty-five (25) percent inhibition concentration, or  $LC_{25}$ .

2. The allowable instream concentration of toxic substances, or whole effluents containing toxic substances, which are bioaccumulative or persistent, including pesticides, if not specified elsewhere in this section, shall not exceed:

a. 0.01 of the ninety-six (96) hour median lethal concentration ( $LC_{50}$ ) of representative indigenous or indicator aquatic organisms; or

b. A chronic toxicity unit of 1.00 utilizing the  $IC_{25}$ .

3. In the absence of acute criteria for pollutants listed in Table 1 of Section 6 of this administrative regulation, ~~or~~ for other substances known to be toxic but not listed in this administrative regulation, or for whole effluents ~~that~~<sup>which</sup> are acutely toxic, the allowable instream concentration shall not exceed the  $LC_1$  or one-third (1/3)  $LC_{50}$  concentration derived from toxicity tests on representative indigenous or indicator aquatic organisms or exceed three-tenths (0.3) acute toxicity units.

4. If specific application factors have been determined for a toxic substance or whole effluent such as an acute to chronic ratio or water effect ratio, they may be used instead of the one-tenth (0.1) and 0.01 factors listed in this subsection upon demonstration by the applicant that the application factors are scientifically defensible~~[approval by the cabinet]~~.

5. Allowable instream concentrations for specific pollutants for the protection of warm water aquatic habitat are listed in Table 1 of Section 6 of this administrative regulation. These concentrations are based on protecting aquatic life from acute and chronic toxicity and shall not be exceeded; and[-]

(k) Total residual chlorine. Instream concentrations for total residual chlorine shall not exceed an acute criteria value of nineteen (19)  $\mu\text{g/l}$  or a chronic criteria value of eleven (11)  $\mu\text{g/l}$ .

(2) Cold water aquatic habitat. The following parameters and criteria are for the protection of productive cold water aquatic communities and streams that support trout populations, whether self-sustaining or reproducing, on a year-round basis. The criteria adopted for the protection of warm water aquatic life also apply to the protection of cold water habitats with the following additions:

(a) Dissolved oxygen.

1. A minimum concentration of six and zero-tenths (6.0) mg/l as a twenty-four (24) hour~~daily~~ average and five and zero-tenths (5.0) mg/l as an instantaneous minimum shall be maintained.

2. In lakes and reservoirs that support trout, the concentration of dissolved oxygen in waters below the epilimnion shall be kept consistent with natural water quality; and[-]

(b) Temperature. Water temperature shall not be increased through human activities above the natural seasonal temperatures.

~~[(3) Modified warm water aquatic habitat. The criteria adopted for the protection of warm water aquatic habitat also shall apply to the protection of modified warm water aquatic habitat, except that for dissolved oxygen a minimum concentration of four and zero tenths (4.0) mg/l as a twenty four (24) hour average and three and zero tenths (3.0) mg/l as an instantaneous minimum shall be maintained.]~~

Section 5. Domestic Water Supply Use. Maximum allowable in-stream concentrations for specific substances, to be applicable at the point of withdrawal, as established in 401 KAR 10:026, Section 5(2)(b), Table B, for use for domestic water supply from surface water sources are specified in Table 1 of Section 6 of this administrative regulation and shall not be exceeded.

Section 6. Pollutants. (1) Allowable instream concentrations of pollutants are listed in Table 1 of this section.

Table 1					
Pollutant	CAS <sup>1</sup> Number	Water Quality Criteria $\mu\text{g/L}$ <sup>2</sup>			
		Human Health:		Warm Water Aquatic Habitat <sup>3</sup> :	
		DWS <sup>4</sup>	Fish <sup>5</sup>	Acute <sup>6</sup>	Chronic <sup>7</sup>
Acenaphthene	83329	670	990	-	-
Acrolein	107028	190	290	-	-
Acrylonitrile	107131	0.051	0.25	-	-
Aldrin	309002	0.000049	0.000050	3.0	-
alpha-BHC	319846	0.0026	0.0049	-	-
alpha-Endosulfan	959988	62	89	0.22	0.056
Anthracene	120127	8,300	40,000	-	-
Antimony	7440360	5.6	640	-	-
Arsenic	7440382	10.0	-	340	150
Asbestos	1332214	7 million fibers/L	-	-	-
Barium	7440393	1,000	-	-	-
Benzene	71432	2.2	51	-	-
Benzidine	92875	0.000086	0.00020	-	-

Benzo(a)anthracene	56553	0.0038	0.018	-	-
Benzo(a)pyrene	50328	0.0038	0.018	-	-
Benzo(b)fluoranthene	205992	0.0038	0.018	-	-
Benzo(k)fluoranthene	207089	0.0038	0.018	-	-
Beryllium	7440417	4	-	-	-
Beta-BHC	319857	0.0091	0.017	-	-
Beta-Endosulfan	33213659	62	89	0.22	0.056
bis(chloromethyl)ether	542881	0.00010	0.00029	-	-
bis(2-chloroethyl)ether	111444	0.030	0.53	-	-
bis(2-chloroisopropyl)ether	108601	1,400	65,000	-	-
bis(2-ethylhexyl)phthalate	117817	1.2	2.2	-	-
Bromoform	75252	4.3	140	-	-
Butylbenzyl phthalate	85687	1,500	1,900	-	-
Cadmium	7440439	5	-	e(1.0166 (In Hard*)-3.924)	e(0.7409 (In Hard*)- 4.719)
Carbon tetrachloride	56235	0.23	1.6	-	-
Chlordane	57749	0.00080	0.00081	2.4	0.0043
Chloride	16887006	250,000	-	<b>1,200,000</b> <del>860,000</del>	<b>600,000</b> <del>230,000</del>
Chlorobenzene	108907	<u>130</u>	<u>1600</u>	-	-
Chlorodibromomethane	124481	0.40	13	-	-
Chloroform	67663	5.7	470	-	-
Chloropyrifos	2921882	-	-	0.083	0.041
Chromium	N/A	100	-	-	-
Chromium (III)	16065831	-	-	e(0.8190 (In Hard*)+ 3.7256)	e(0.8190 (In Hard*)+ 0.6848)
Chromium (VI)	18540299	-	-	16	11
Chrysene	218019	0.0038	0.018	-	-
Color	N/A	75 Platinum Cobalt Units	-	-	-
Copper	7440508	1,300	-	e(0.9422 (In Hard*)- 1.700)	e(0.8545 (In Hard*)- 1.702)
Cyanide, Free	57125	<u>140</u>	<u>140</u>	22	5.2
Demeton	8065483	-	-	-	0.1
Diazinon	333415	-	-	<u>0.17</u>	<u>0.17</u>
Dibenzo(a,h)anthracene	53703	0.0038	0.018	-	-
Dichlorobromomethane	75274	0.55	17	-	-
Dieldrin	60571	0.000052	0.000054	0.24	0.056
Diethyl phthalate	84662	17,000	44,000	-	-
Dimethyl phthalate	131113	270,000	1,100,000	-	-
Di-n-butyl phthalate	84742	2,000	4,500	-	-
Dinitrophenols	25550587	69	5300	-	-
Endosulfan sulfate	1031078	62	89	-	-
Endrin	72208	<u>0.059</u>	<u>0.060</u>	0.086	0.036

Endrin aldehyde	7421934	0.29	0.30	-	-
Ethylbenzene	100414	530	2100	-	-
Fluoranthene	206440	130	140	-	-
Fluorene	86737	1,100	5,300	-	-
Fluoride	N/A	4,000	-	-	-
gamma-BHC (Lindane)	58899	0.98	1.8	0.95	-
Guthion	86500	-	-	-	0.01
Heptachlor	76448	0.000079	0.000079	0.52	0.0038
Heptachlor epoxide	1024573	0.000039	0.000039	0.52	0.0038
Hexachlorobenzene	118741	0.00028	0.00029	-	-
Hexachlorobutadiene	87683	0.44	18	-	-
Hexachlorocyclo-hexane-Technical	319868	0.0123	0.0414	-	-
Hexachlorocyclopentadiene	77474	40	1100	-	-
Hexachloroethane	67721	1.4	3.3	-	-
Ideno(1,2,3-cd)pyrene	193395	0.0038	0.018	-	-
Iron <sup>8</sup>	7439896	300	-	4,000	1,000
Isophorone	78591	35.0	960	-	-
Lead	7439921	15	-	e(1.273 (ln Hard*)-1.460)	e(1.273 (ln Hard*)-4.705)
Lindane (gamma-BHC)	58899	0.98	1.8	0.95	-
Malathion	121755	-	-	-	0.1
Mercury	7439976	2.0	0.051	1.4	0.77
Methylmercury	22967926	-	0.3 mg/Kg	-	-
Methoxychlor	72435	100	-	-	0.03
Methylbromide	74839	47	1,500	-	-
Methylene Chloride	75092	4.6	590	-	-
Mirex	2385855	-	-	-	0.001
Nickel	7440020	610	4,600	e(0.8460 (ln Hard*)+2.255)	e(0.8460 (ln Hard*)+0.0584)
Nitrate (as N)	14797558	10,000	-	-	-
Nitrobenzene	98953	17	690	-	-
Nitrosamines, Other	N/A	0.0008	1.24	-	-
N-Nitrosodibutylamine	924163	0.0063	0.22	-	-
N-Nitrosodiethylamine	55185	0.0008	1.24	-	-
N-Nitrosodimethylamine	62759	0.00069	3.0	-	-
N-Nitrosodi-n-Propylamine	621647	0.0050	0.51	-	-
N-Nitrosodiphenylamine	86306	3.3	6.0	-	-
N-Nitrosopyrrolidine	930552	0.016	34	-	-
Nonylphenol	1044051	-	-	28	6.6
Parathion	56382	-	-	0.065	0.013
Pentachlorobenzene	608935	1.4	1.5	-	-
Pentachlorophenol	87865	0.27	3.0	e(1.005 (pH)-4.869)	e(1.005 (pH)-5.134)
Phenol	108952	21,000	1,700,000	-	-
Polychlorinated Biphenyls (PCBs)	N/A	0.000064	0.000064	-	0.014

Pyrene	129000	830	4,000	-	-
Selenium	7782492	170	4,200	20	5.0
Silver	7440224	-	-	e(1.72 (ln Hard*)-6 .59)	-
Sulfate	N/A	250,000	-	-	-
Hydrogen Sulfide, Undissociated	7783064	-	-	-	2.0
Tetrachloroethylene	127184	0.69	3.3	-	-
Thallium	7440280	0.24	0.47	-	-
Toluene	108883	1300	15,000	-	-
Total Dissolved Solids	N/A	250,000	-	-	-
Toxaphene	8001352	0.00028	0.00028	0.73	0.0002
Tributyltin (TBT)				0.46	0.072 <i>12mc</i>
Trichloroethylene	79016	2.5	30	-	-
Vinyl Chloride	75014	0.025	2.4	-	-
Zinc	7440666	7,400	26,000	e(0.8473 (ln Hard*)+ 0.884)	e(0.8473 (ln Hard*)+ 0.884)
1,1-dichloroethylene	75354 <i>12mc</i>	330 ✓	7100	-	-
1,1,1-trichloroethane	71556	200	-	-	-
1,1,2-trichloroethane	79005	0.59	16	-	-
1,1,2,2-tetrachloroethane	79345	0.17	4.0	-	-
1,2-dichlorobenzene	95501	420	1300	-	-
1,2-dichloroethane	107062	0.38	37	-	-
1,2-dichloropropane	78875	0.50	15	-	-
1,2-diphenylhydrazine	122667	0.036	0.20	-	-
1,2-trans-dichloroethylene	156605	140	10,000	-	-
1,2,4-trichlorobenzene	120821	35	70	-	-
1,2,4,5-tetrachlorobenzene	95943	0.97	1.1	-	-
1,3-dichlorobenzene	541731	320	960	-	-
1,3-dichloropropene	542756	0.34	21	-	-
1,4-dichlorobenzene	106467	63	190	-	-
2-chloronaphthalene	91587	1,000	1,600	-	-
2-chlorophenol	95578	81	150	-	-
2-methyl-4,6-dinitrophenol	534521	13	280	-	-
2,3,7,8-TCDD (Dioxin)	1746016	5.0 E - 9	5.1 E - 9	-	-
2,4-D	94757	100	-	-	-
2,4-dichlorophenol	120832	77	290	-	-
2,4-dimethylphenol	105679	380	850	-	-
2,4-dinitrophenol	51285	69	5,300	-	-
2,4-dinitrotoluene	121142	0.11	3.4	-	-
2,4,5-TP (Silvex)	93721	10	-	-	-
2,4,5-trichlorophenol	95954	1,800	3,600	-	-
2,4,6-trichlorophenol	88062	1.4	2.4	-	-
3,3'-dichlorobenzidine	91941	0.021	0.028	-	-
4,4'-DDD	72548	0.00031	0.00031	-	-
4,4'-DDE	72559	0.00022	0.00022	-	-

4,4'-DDT	50293	0.00022	0.00022	1.1	0.001
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<sup>1</sup>CAS = Chemical Abstracts Service.

<sup>2</sup>Water quality criteria in µg/L unless reported in different units.

<sup>3</sup>Metal concentrations shall be total recoverable metals to be measured in an unfiltered sample, unless it can be demonstrated that a more appropriate analytical technique is available that provides a measurement of that portion of the metal present which causes toxicity to aquatic life.

<sup>4</sup>DWS = Domestic Water Supply Source.

<sup>5</sup>Fish = Fish Consumption.

<sup>6</sup>Acute criteria = protective of aquatic life based on one (1) hour exposure that does not exceed the criterion for a given pollutant.

<sup>7</sup>Chronic = protective of aquatic life based on ninety-six (96) hour exposure that does not exceed the criterion of a given pollutant more than once every three (3) years on the average.

<sup>8</sup>The chronic criterion for iron shall not exceed three and five tenths (3.5) mg/l (thirty-five hundred [3500] µg/l) if aquatic life has not been shown to be adversely affected.

\*Hard = Hardness as mg/l CaCO<sub>3</sub>.

(2) The following additional criteria for radionuclides shall apply for Domestic [Drinking] Water Supply use:

(a) The gross total alpha particle activity, including radium-226 but excluding radon and uranium, shall not [te] exceed fifteen (15) pCi/l;

(b) Combined radium-226 and radium-228 shall not [te] exceed five (5) pCi/l. Specific determinations of radium-226 and radium-228 are not necessary if dissolved gross alpha particle activity does not exceed five (5) pCi/l;

(c) The concentration of total gross beta particle activity shall not [te] exceed fifty (50) pCi/l;

(d) The concentration of tritium shall not [te] exceed 20,000 pCi/l;

(e) The concentration of total Strontium-90 shall not [te] exceed eight (8) pCi/l; or

(f) The concentration of uranium shall not [te] exceed thirty (30) µg/l.

Table 4					
Pollutant	CAS <sup>1</sup> Number	Water Quality Criteria µg/L <sup>2</sup>			
		Human Health:		Warm Water Aquatic Habitat <sup>3</sup> :	
		DWS <sup>4</sup>	Fish <sup>5</sup>	Acute	Chronic
Acenaphthene	83329	670	990	-	-
Aerolein	407028	490	290	-	-
Acrylonitrile	107134	0.054	0.25	-	-
Aldrin	309002	0.000049	0.000050	3.0	-
alpha-BHC	349846	0.0026	0.0049	-	-
alpha-Endosulfan	959989	62	89	0.22	0.056
Anthracene	120127	8,300	40,000	-	-
Antimony	7440360	5.6	640	-	-
Arsenic	7440382	10.0	-	340	150
Asbestos	1332244	7 million fibers/L	-	-	-
Barium	7440393	1,000	-	-	-
Benzene	71432	2.2	54	-	-
Benzidine	92875	0.000086	0.00020	-	-
Benzo(a)anthracene	56553	0.0038	0.018	-	-
Benzo(a)pyrene	50328	0.0038	0.018	-	-
Benzo(b)fluoranthene	205992	0.0038	0.018	-	-
Benzo(k)fluoranthene	207089	0.0038	0.018	-	-
Beryllium	7440417	4	-	-	-
Beta-BHC	349857	0.0094	0.017	-	-
Beta-Endosulfan	33213659	62	89	0.22	0.056



bis(chloromethyl)ether	542884	0.00040	0.00020	-	-
bis(2-chloroethyl)ether	411444	0.030	0.53	-	-
bis(2-chloroisopropyl)ether	408604	1,400	65,000	-	-
bis(2-ethylhexyl)phthalate	447817	1.2	2.2	-	-
Bromoform	75252	4.3	140	-	-
Butylbenzyl-phthalate	85687	1,500	1,900	-	-
Cadmium	7440439	5	-	e(1.0166 (ln Hard*)-3.924)	e(0.7409 (ln Hard*)- 4.719)
Carbon tetrachloride	56235	0.23	1.6	-	-
Chlordane	57749	0.00080	0.00081	2.4	0.0043
Chloride	46887006	250,000	-	1,200,000	600,000
Chlorobenzene	408907	680	21,000	-	-
Chlorodibromomethane	424484	0.40	13	-	-
Chloroform	67663	5.7	470	-	-
Chloropyrifos	2921882	-	-	0.083	0.041
Chromium	N/A	100	-	-	-
Chromium (III)	46065834	-	-	e(0.8190 (ln Hard*)+ 3.7256)	e(0.8190 (ln Hard*)+ 0.6848)
Chromium (VI)	48540299	-	-	16	11
Chrysene	218049	0.0038	0.018	-	-
Cobalt	N/A	75 Platinum Gebalt Units	-	-	-
Copper	7440508	1,300	-	e(0.9422 (ln Hard*)- 1.700)	e(0.8545 (ln Hard*)- 1.702)
Cyanide, Free	57125	700	220,000	22	5.2
Demeton	8065483	-	-	-	0.1
Dibenzo(a,h)anthracene	53703	0.0038	0.018	-	-
Dichlorobromomethane	75274	0.55	17	-	-
Dieldrin	60571	0.000052	0.000054	0.24	0.056
Diethyl-phthalate	84662	17,000	44,000	-	-
Dimethyl-phthalate	431113	270,000	1,100,000	-	-
Di-n-butyl-phthalate	84742	2,000	4,500	-	-
Dinitrophenols	25550587	69	5300	-	-
Endosulfan-sulfate	4031078	62	89	-	-
Endrin	72208	0.76	0.81	0.086	0.036
Endrin-aldehyde	7421934	0.29	0.39	-	-
Ethylbenzene	400414	3,100	29,000	-	-
Fluoranthene	206440	130	140	-	-
Fluorene	86737	1,100	5,300	-	-
Fluoride	N/A	2,000	-	-	-
Foaming Agents	N/A	500	-	-	-
gamma-BHC (Lindane)	58899	0.019	0.063	0.95	-
Guthion	86509	-	-	-	0.01
Heptachlor	76448	0.000079	0.000079	0.52	0.0038

Heptachlor epoxide	4024573	0.000030	0.000030	0.52	0.0038
Hexachlorobenzene	418741	0.00028	0.00029	-	-
Hexachlorobutadiene	87683	0.44	18	-	-
Hexachlorocyclo-hexane Technical	319868	0.0123	0.0414	-	-
Hexachlorocyclopentadiene	77474	240	17,000	-	-
Hexachloroethane	67721	1.4	3.3	-	-
Ideno(1,2,3-cd)pyrene	493395	0.0038	0.018	-	-
Iron <sup>6</sup>	7439896	-	-	4,000	1,000
Isophorone	78591	35.0	960	-	-
Lead	7439921	15	-	e(1.273 (ln Hard*)- 1.460)	e(1.273 (ln Hard*)- 4.705)
Malathion	421755	-	-	-	0.1
Mercury	7439976	2.0	0.051	1.7	0.01
Methoxychlor	72435	40.0	-	-	0.03
Methylbromide	74839	47	1,500	-	-
Methylene Chloride	75092	4.6	590	-	-
Mirex	2385855	-	-	-	0.001
Nickel	7440020	610	4,600	e(0.8460 (ln Hard*)+ 2.255)	e(0.8460 (ln Hard*)+ 0.0584)
Nitrate (as N)	44797558	10,000	-	-	-
Nitrobenzene	98953	17	690	-	-
Nitrosamines, Other	N/A	0.0008	1.24	-	-
N-Nitrosodibutylamine	924163	0.0063	0.22	-	-
N-Nitrosodiethylamine	55185	0.0008	1.24	-	-
N-Nitrosodimethylamine	62759	0.00069	3.0	-	-
N-Nitrosodi-n-Propylamine	621647	0.0050	0.51	-	-
N-Nitrosodiphenylamine	86306	3.3	6.0	-	-
N-Nitrosopyrrolidine	930552	0.016	34	-	-
Parathion	56382	-	-	0.065	0.013
Pentachlorobenzene	608935	1.4	1.5	-	-
Pentachlorophenol	87865	0.27	3.0	e(1.005 (pH)-4.869)	e(1.005 (pH)-5.134)
Phthalate esters	N/A	-	-	-	3
Phenol	108952	21,000	1,700,000	-	-
Polychlorinated Biphenyls (PCBs)	N/A	0.000064	0.000064	-	0.0014
Pyrene	129000	830	4,000	-	-
Selenium	7782492	170	4,200	20	5.0
Silver	7440224	-	-	e(1.72 (ln Hard*)-6 -59)	-
Sulfate	N/A	250,000	-	-	-
Hydrogen Sulfide, Undissociated	7783064	-	-	-	2.0
Tetrachloroethylene	427184	0.69	3.3	-	-
Thallium	7440280	1.7	6.3	-	-
Toluene	108883	6,800	200,000	-	-

Total Dissolved Solids	N/A	750,000	-	-	-
Toxaphene	8001352	0.00028	0.00028	0.73	0.0002
Trichloroethylene	79046	2.5	30	-	-
Vinyl Chloride	75014	2.0	530	-	-
Zinc	7440666	7,400	26,000	e(0.8473 (ln Hard*)+ 0.884)	e(0.8473 (ln Hard*)+ 0.884)
1,1-dichloroethylene	75354	0.057	3.2	-	-
1,1,1-trichloroethane	71556	200	-	-	-
1,1,2-trichloroethane	79005	0.59	16	-	-
1,1,2,2-tetrachloroethane	79345	0.17	4.0	-	-
1,2-dichlorobenzene	95501	2,700	17,000	-	-
1,2-dichloroethane	107062	0.38	37	-	-
1,2-dichloropropene	78875	0.50	15	-	-
1,2-diphenylhydrazine	122667	0.036	0.20	-	-
1,2-trans-dichloroethylene	156605	700	140,000	-	-
1,2,4-trichlorobenzene	120821	260	940	-	-
1,2,4,5-tetrachlorobenzene	95943	0.97	1.1	-	-
1,3-dichlorobenzene	541731	320	960	-	-
1,3-dichloropropene	542756	10	1,700	-	-
1,4-dichlorobenzene	106467	400	2,600	-	-
2-chloronaphthalene	91587	1,000	1,600	-	-
2-chlorophenol	95578	81	150	-	-
2-methyl-4,6-dinitrophenol	534521	13	280	-	-
2,3,7,8-TCDD (Dioxin)	1746016	5.0 E-9	5.1 E-9	-	-
2,4-D	94757	70	-	-	-
2,4-dichlorophenol	120832	77	290	-	-
2,4-dimethylphenol	105679	380	850	-	-
2,4-dinitrophenol	51285	69	5,300	-	-
2,4-dinitrotoluene	121142	0.11	3.4	-	-
2,4,5-TP (Silvex)	93721	10	-	-	-
2,4,5-trichlorophenol	95954	1,800	3,600	-	-
2,4,6-trichlorophenol	88062	1.4	2.4	-	-
3,3'-dichlorobenzidine	91941	0.021	0.028	-	-
4,4'-DDD	72548	0.00031	0.00031	-	-
4,4'-DDE	72559	0.00022	0.00022	-	-
4,4'-DDT	50293	0.00022	0.00022	1.1	0.001

<sup>1</sup>CAS = Chemical Abstracts Service.

<sup>2</sup>Water quality criteria in µg/L unless reported in different units.

<sup>3</sup>Metal concentrations shall be total recoverable metals to be measured in an unfiltered sample, unless it can be demonstrated to the satisfaction of the cabinet that a more appropriate analytical technique is available that provides a measurement of that portion of the metal present which causes toxicity to aquatic life.

<sup>4</sup>DWS = Domestic Water Supply Source.

<sup>5</sup>Fish = Fish Consumption.

<sup>6</sup>The chronic criterion for iron shall not exceed three and five tenths (3.5) mg/l if aquatic life has not been shown to be adversely affected.

\*Hard = Hardness as mg/l CaCO<sub>3</sub>

Section 7. Recreational Waters. (1) Primary contact recreation water. The following criteria shall apply to waters designated as primary contact recreation use during the primary contact recreation season of May 1 through October 31:

(a) Fecal coliform content or Escherichia coli content shall not exceed 200 colonies per 100 ml or 130 colonies per 100 ml respectively as a geometric mean based on not less than five (5) samples taken during a thirty (30) day period. Content also shall not exceed 400 colonies per 100 ml in twenty (20) percent or more of all samples taken during a thirty (30) day period for fecal coliform or 240 colonies per 100 ml for Escherichia coli. ~~[These limits shall be applicable during the recreation season of May 1 through October 31.]~~ Fecal coliform criteria listed in subsection (2)(a) of this section shall apply during the remainder of the year; and[-]

(b) pH shall be between six and zero-tenths (6.0) to nine and zero-tenths (9.0) and shall not change more than one and zero-tenths (1.0) pH unit within this range over a period of twenty-four (24) hours.

(2) Secondary contact recreation water. The following criteria shall apply to waters designated for secondary contact recreation use during the entire year:

(a) Fecal coliform content shall not exceed 1,000 colonies per 100 ml as a thirty (30) day geometric mean based on not less than five (5) samples; nor exceed 2,000 colonies per 100 ml in twenty (20) percent or more of all samples taken during a thirty (30) day period; and[-]

(b) pH shall be between six and zero-tenths (6.0) to nine and zero-tenths (9.0) and shall not change more than one and zero-tenths (1.0) pH unit within this range over a period of twenty-four (24) hours.

Section 8. Outstanding State Resource Waters. This designation category includes certain unique waters of the commonwealth.

(1) Water for inclusion.

(a) Automatic inclusion. The following surface waters shall automatically be included in this category:

1. Waters designated under the Kentucky Wild Rivers Act, KRS 146.200-146.360;
2. Waters designated under the Federal Wild and Scenic Rivers Act, 16 U.S.C. 1271-1287 ~~[et seq.]~~;
3. Waters identified under the Kentucky Nature Preserves Act, KRS 146.410-146.530, which are contained within a formally dedicated nature preserve or are published in the registry of natural areas in accordance with 400 KAR 2:080 and concurred upon by the cabinet; and
4. Waters that support federally recognized endangered or threatened species under the Endangered Species Act of 1973, as amended, 16 U.S.C. 1531-1544 ~~[et seq.]~~.

(b) Permissible consideration. Other surface waters shall be considered for inclusion in this category ~~[may be included in this category as determined by the cabinet]~~ if:

1. The surface waters flow through or are bounded by state or federal forest land, or are of exceptional aesthetic or ecological value or are within the boundaries of national, state, or local government parks, or are a part of a unique geological or historical area recognized by state or federal designation; or

2. The surface water is a component part of an undisturbed or relatively undisturbed watershed that can provide basic scientific data and possess outstanding water quality characteristics,[-] or fulfill two (2) of the following criteria:

- a. Support a diverse or unique native aquatic flora or fauna;
- b. Possess physical or chemical characteristics that provide an unusual and uncommon aquatic habitat; or
- c. Provide a unique aquatic environment within a physiographic region.

(2) Outstanding state resource waters protection. The designation of certain waters as outstanding state resource waters shall fairly and fully reflect those aspects of the waters for which the designation is proposed. The cabinet shall determine water quality criteria for these waters as follows:

(a) At a minimum, the criteria of Section 2 and Table 1 of Section 6 of this administrative regulation and the appropriate criteria associated with the stream use designation assignments in 401 KAR 10:026~~[5-026]~~, shall be applicable to these waters.

(b) Outstanding state resource waters that are listed as Exceptional Waters in 401 KAR 10:030, Section 1(2) shall have dissolved oxygen maintained at a minimum concentration of six and zero-tenths (6.0) mg/l as a twenty-four (24) hour average and an instantaneous minimum concentration of not less than five and zero-tenths (5.0) mg/l.

(c) 1. If the values identified for an outstanding state resource water are dependent upon or related to instream water quality, the cabinet shall review existing water quality criteria and determine if additional criteria or more stringent criteria are necessary for protection, and evaluate the need for the development of additional data upon which to base the determination.

2. Existing water quality and habitat shall be maintained and protected in those waters designated as outstanding state resource waters that support federally threatened and endangered species of aquatic organisms, unless it can be demonstrated ~~[to the satisfaction of the~~

~~cabinet,~~] that lowering of water quality or a habitat modification will not have a harmful effect on the threatened or endangered species that ~~which~~ the water supports.

(d)~~(e)~~ Adoption of more protective criteria in accordance with this section shall be listed with the respective stream segment in 401 KAR 10:026~~(5:026)~~.

(3) Determination of designation.

(a) A~~Any~~ person may present a proposal to designate certain waters under this section. Documentation requirements in support of an outstanding state resource water proposal shall contain those elements outlined in 401 KAR 10:026~~(5:026)~~, Section 3(3)(a) through (h).

(b)1. The cabinet shall review the proposal and supporting documentation to determine whether the proposed waters qualify as outstanding state resource waters within the criteria established by this administrative regulation.

2. The cabinet shall document the determination to deny or to propose redesignation, and a copy of the decision shall be served upon the petitioner and other interested parties.

(c) After considering all of the pertinent data, a redesignation, if appropriate, shall be made pursuant to 401 KAR 10:026~~(5:026)~~.

Section 9. Water Quality Criteria for the Main Stem of the Ohio River. (1) ~~The following criteria apply to the main stem of the Ohio River from its juncture with the Big Sandy River at River Mile 317.1 to its confluence with the Mississippi River, and shall not be exceeded.~~

(2) ~~These waters shall be subject to all applicable provisions of 401 KAR 10:001, 10:026, 10:029, 10:030, and this administrative regulation, except for those criteria in paragraphs (a) and (b) of this subsection.~~

(a) Dissolved oxygen. Concentrations shall average at least five and zero-tenths (5.0) mg/l per calendar day and shall not be less than four and zero-tenths (4.0) mg/l except during the April 15 - June 15 spawning season when a minimum of five and one-tenth (5.1) mg/l shall be maintained.

(b) Maximum allowable instream concentrations for nitrite-nitrogen for the protection of human health shall be one and zero-tenths (1.0) mg/l and shall be met at the edge of the assigned mixing zone ~~[Requirements and limits shall apply as contained in the Ohio River Valley Water Sanitation Commission's Pollution Control Standards for Discharges to the Ohio River, 2006 Revision]. [The following criteria apply to the main stem of the Ohio River from its juncture with the Big Sandy River at River Mile 317.1 to its confluence with the Mississippi River, and shall not be exceeded. These waters are subject to all applicable provisions of 401 KAR 5:002, 5:026, 5:029, 5:030, and this administrative regulation.]~~

~~(1) Dissolved oxygen. Concentrations shall average at least five and zero tenths (5.0) mg/l per calendar day and shall not be less than four and zero tenths (4.0) mg/l except during the April 15 June 15 spawning season when a minimum of five and one tenth (5.1) mg/l shall be maintained.~~

~~(2) Temperature.~~

~~(a) Allowable stream temperatures are:~~

Month/Date	Period Average (°F)	Instantaneous Maximum (°F)
January 1-31	45	50
February 1-29	45	50
March 1-15	51	56
March 16-31	54	59
April 1-15	58	64
April 16-30	64	69
May 1-15	68	73
May 16-31	75	80
June 1-15	80	85
June 16-30	83	87
July 1-31	84	89
August 1-31	84	89
September 1-15	84	87
September 16-30	82	86

October 1-15	77	82
October 16-31	72	77
November 1-30	67	72
December 1-31	52	57

~~(b) A successful demonstration conducted for thermal discharge limitations under Section 316(a) of the Clean Water Act shall constitute compliance with these temperature criteria.~~

~~(3) Maximum allowable instream concentrations for specific pollutants for the protection of human health are listed in Table 2 of subsection (4) of this section. They shall be met at the edge of the assigned mixing zone.~~

~~(4) To provide for the protection of warm water aquatic life habitats, the criteria in Table 2 of this subsection shall be met at the edge of the assigned mixing zone:~~

Table 2			
Pollutant	Human Health Criteria in $\mu\text{g/L}^1$	Warm Water Aquatic Habitat Criteria in $\mu\text{g/L}^2$	
		Acute	Chronic
Arsenic	10.0	-	-
Barium	2,000	-	-
Cadmium	250,000	$e(1.0166 (\ln \text{Hard}^*) - 3.924)$	$e(0.7409 (\ln \text{Hard}^*) - 4.719)$
Chloride	-	-	-
Chromium, hexavalent	-	16	11
Copper	-	$e(0.9422 (\ln \text{Hard}^*) - 1.700)$	$e(0.9545 (\ln \text{Hard}^*) - 1.702)$
Cyanide, Free	-	22	5.2
Fluoride	2,000	-	-
Lead	-	$e(1.273 (\ln \text{Hard}^*) - 1.460)$	$e(1.273 (\ln \text{Hard}^*) - 4.705)$
Mercury	-	-	-
Nickel	-	$e(0.8460 (\ln \text{Hard}^*) + 2.255)$	$e(0.8460 (\ln \text{Hard}^*) + 0.0584)$
Nitrite + Nitrate Nitrogen	10,000	-	-
Nitrite Nitrogen	1,000	-	-
Phenolics	5	-	-
Silver	100	$e(1.72 (\ln \text{Hard}^*) - 6.59)$	-
Sulfate	250,000	-	-
Zinc	-	$(0.8473 (\ln \text{Hard}^*) + 0.884)$	$e(0.8473 (\ln \text{Hard}^*) + 0.884)$

<sup>1</sup> ~~Metal concentrations, for the purposes of human health criteria, shall be total recoverable values except hexavalent chromium, which is dissolved.~~

<sup>2</sup> ~~Metal concentrations, for the purposes of warm water aquatic habitat criteria, shall be total recoverable metals to be measured in an unfiltered sample, unless it can be demonstrated to the satisfaction of the cabinet that a more appropriate analytical technique is available that provides a measurement of that portion of the metal present which causes toxicity to aquatic life.~~

<sup>\*</sup>Hard = Hardness as  $\text{mg/l CaCO}_3$

~~(5) The net discharge of aldrin, dieldrin, DDT, including DDD and DDE, endrin, toxaphene, benzidine, and PCBs is prohibited.]~~

Section 10. Exceptions to Criteria for Specific Surface Waters. (1) The cabinet may grant exceptions to the criteria contained in Sections 2, 4, 6, 7, 8, and 9 of this administrative regulation for specific surface water upon demonstration by an applicant that maintenance of applicable water quality criteria is not attainable or scientifically valid but the use designation is still appropriate. ~~[This determination shall be made on a case-by-case basis with respect to a specific surface water following an analysis for each area.]~~

(2) The analysis shall show that the water quality criteria cannot be reasonably achieved, either on a seasonal or year-round basis due to natural conditions[,] or site-specific factors differing from the conditions used to derive criteria in Sections 2, 4, 6, 7, 8, and 9 of this administrative regulation.

(a) Site-specific criteria shall be developed by the applicant utilizing toxicity tests, indicator organisms, and application factors that shall be ~~[are]~~ consistent with those outlined in Chapter 3 of ~~[the]~~ "Water Quality Standards Handbook", EPA, 1994, ~~[incorporated by reference in Section~~

~~42 of this administrative regulation).~~

(b) In addition, an applicant shall supply the documentation listed in 401 KAR 10:026~~(5-026)~~, Section 3.

(3) An exception to criteria listed in Table 1 of Section 6 of this administrative regulation for the protection of human health from the consumption of fish tissue may be granted if it is~~can be~~ demonstrated that natural, ephemeral, intermittent, or low flow conditions or water levels preclude the year-round support of a fishery, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges.

(4) Before granting an exception to water quality criteria, the cabinet shall ensure that the water quality standards of downstream waters shall be~~are~~ attained and maintained.

(5) All exceptions to water quality criteria shall be subject to review at least every three (3) years.

(6) Exceptions to water quality criteria shall be adopted as an administrative regulation by listing them with the respective surface water in 401 KAR 10:026~~(5-026)~~.

Section 11. Exceptions to Criteria for Individual Dischargers. (1) An exception to criteria may be granted to an individual discharger based on a demonstration by the discharger, ~~[following the guidelines in]~~~~["Interim Economic Guidance for Water Quality Standards Workbook"]~~~~["EPA March 1995"]~~~~[incorporated by reference in Section 12. of this administrative regulation]~~, that KPDES permit compliance with existing instream criteria cannot be attained because of factors specified in 401 KAR 10:026, Section 2(4)(a) through (f). ~~[shall result in substantial and widespread adverse economic and social impacts.]~~

(2) The demonstration shall include an assessment of alternative pollution control strategies and biological assessments that indicated designated uses are being met.

(3) Before granting an exception, the cabinet shall ensure that the water quality standards of downstream waters shall be~~are~~ attained and maintained.

(4) All exceptions shall be submitted to the cabinet for review at least every three (3) years. Upon review, the discharger shall demonstrate to the cabinet the~~that a reasonable~~ effort the discharger~~has been~~ made to reduce the pollutants in the discharge to levels that would achieve existing applicable water quality criteria.

(5) The highest level of effluent quality that can be economically and technologically achieved shall be ensured while the exception is in effect.

(6) The Kentucky Pollution Discharge Elimination System permitting program shall be the mechanism for the review and public notification of intentions to grant exceptions to criteria.

Section 12. Incorporation by Reference. (1) The following material is incorporated by reference:

(a) "Water Quality Standards Handbook-Chapter 3", EPA August 1994, Publication EPA-823-B-94-005a, U.S. Environmental Protection Agency, Office of Water, Washington, D.C.; and

(b) "Interim Economic Guidance for Water Quality Standards Workbook", EPA March 1995, Publication EPA-823-B-95-002, U.S. Environmental Protection Agency, Office of Water, Washington, D.C.

~~[(c) Ohio River Valley Water Sanitation Commission's "Pollution Control Standards for Discharges to the Ohio River", 2006 Revision.]~~

(2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Division of Water, 200 Fair Oaks Lane ~~[44 Reilly Road]~~, Frankfort, Kentucky, Monday through Friday, 8 a.m. to 4:30 p.m.

LEONARD K. PETERS, Secretary

APPROVED BY AGENCY: September 11, 2008

FILED WITH LRC: September 12, 2008 at noon

CONTACT PERSON: Abigail Powell, Regulations Coordinator, Division of Water, 14 Reilly Road, Frankfort, Kentucky 40601, phone (502) 564-3410 fax (502) 564-0111, email Abigail.Powell@ky.gov.

#### REGULATORY IMPACT ANALYSIS AND TIERING STATEMENT

Contact Person: Sandy Gruzsky

(1) Provide a brief summary of:

(a) What this administrative regulation does: This administrative regulation sets forth water quality standards for surface waters of the

Commonwealth and the associated water quality criteria necessary to protect designated uses.

(b) The necessity of this administrative regulation: This administrative regulation is necessary for the protection of public health, aquatic habitat, and designated uses of the surface waters of the Commonwealth.

(c) How this administrative regulation conforms to the content of the authorizing statutes: This administrative regulation conforms to KRS 224.10-100, which requires the cabinet to develop and conduct a comprehensive program for the management of water resources and to provide for the prevention, abatement, and control of water pollution. This administrative regulation and 401 KAR 10:001, 10:026, 10:029, and 10:030 establish procedures to protect the surface waters of the Commonwealth, and thus manage water resources and prevent water pollution. This administrative regulation describes the criteria applied in 401 KAR 10:026 to the surface waters of the Commonwealth. This administrative regulation establishes water quality standards that consist of designated legitimate uses of the surface waters of the Commonwealth and the associated water quality criteria necessary to protect those uses.

(d) How this administrative regulation currently assists or will assist in the effective administration of the statutes: This administrative regulation will assist in the administration of the statutes by providing specific criteria and water quality standards for the protection of surface waters of the Commonwealth as required by the authorizing statutes.

(2) If this is an amendment to an existing administrative regulation, provide a brief summary of:

(a) How the amendment will change this existing administrative regulation: This amendment updates water quality criteria to reflect scientific developments. Water quality criteria for domestic water supply sources have been revised to include 2 new limits, 14 stricter limits, and 4 less strict limits. Water quality criteria for fish tissue have been revised to include 2 new limits, 13 stricter limits, and 2 less strict limits. Water quality criteria for warm water aquatic habitat acute values have been revised to include 3 new limits and 2 stricter limits. Water quality criteria for warm water aquatic habitat chronic values have been revised to include 2 new limits, 2 stricter limits, and eliminate 1 limit. Criteria for radionuclides, which are based on Maximum Contaminant Levels for finished drinking water in the Safe Drinking Water Act, have been moved from minimum criteria applicable to all waters to apply only to domestic water supply use. Dissolved oxygen criteria of 6.0 mg/l average and 5.0 mg/l minimum have been added for Outstanding State Resource Water.

(b) The necessity of the amendment to this administrative regulation: This amendment is necessary to revise criteria to protect human health and to meet federal recommendations. For Kentucky to maintain its delegation over the NPDES permit program, the Clean Water Act requires that Kentucky review its water quality standards every three years and comply with the programmatic requirements of 40 C.F.R. Part 131. This administrative regulation is being amended as part of the triennial review.

(c) How the amendment conforms to the content of the authorizing statutes: This amendment conforms to KRS 224.10-100, which requires the cabinet to develop and conduct a comprehensive program for the management of water resources and to provide for the prevention, abatement, and control of water pollution. This amendment establishes procedures to protect the surface waters of the Commonwealth, and thus protect water resources. This amendment establishes water quality standards that consist of designated legitimate uses of the surface waters of the Commonwealth and the associated water quality criteria necessary to protect those uses.

(d) How the amendment will assist in the effective administration of the statutes: This amendment will assist in the administration of the statutes by providing revised and up-to-date criteria and water quality standards for the protection of surface waters of the Commonwealth in accordance with the intent of the authorizing statutes.

(3) List the type and number of individuals, businesses, organizations, or state and local governments affected by this administrative regulation: This administrative regulation will not affect permitted facilities until they apply for reissuance of their KPDES permits. The amendment will affect any new, previously unpermitted wastewater dischargers. Municipalities with approved pretreatment programs set local limits for their industrial dischargers. These dischargers may be affected by this amended administrative regulation.

(4) Provide an analysis of how the entities identified in question (3) will be impacted by either the implementation of this administrative regulation, if new, or by the change, if it is an amendment, including:

(a) List the actions that each of the regulated entities identified in question (3) will have to take to comply with this administrative regulation or amendment: The revised water quality criteria will be implemented at the time of permit issuance at existing facilities and new dischargers and expanded facilities will comply with the revisions. Additional costs may be incurred where criteria are more stringent than before or where new criteria are established and less cost will be incurred where criteria have been lowered or eliminated.

(b) In complying with this administrative regulation or amendment, how much will it cost each of the entities identified in question (3): The costs to comply with this administrative regulation will vary considerably depending on the site location, the type of activity occurring, and other factors. Therefore, it is not possible to determine quantitative costs to implement this regulation.

(c) As a result of compliance, what benefits will accrue to the entities identified in question (3): Less costs may be incurred where criteria are less stringent than previously or where criteria have been eliminated. Direct and indirect savings will be realized through reduced drinking



water treatment costs, maintenance of good agricultural water, maintenance of fisheries, and healthy recreational waters.

(5) Provide an estimate of how much it will cost the administrative body to implement this administrative regulation:

(a) Initially: This amendment does not change routine procedures involved in managing construction grants, permitting, compliance monitoring, or enforcement. Implementation costs should remain relatively constant.

(b) On a continuing basis: No major costs are anticipated. The cabinet, in implementing the requirements of this amended administrative regulation, will internalize associated costs with normal budget appropriations. The existing budget for the Division of Water utilizes approximately \$800,000 in general funds and approximately \$240,000 in federal funds to implement this regulation.

(6) What is the source of the funding to be used for the implementation and enforcement of this administrative regulation? The source of revenue will be the General Fund and federal funds, as appropriated by the Kentucky General Assembly.

(7) Provide an assessment of whether an increase in fees or funding will be necessary to implement this administrative regulation, if new, or by the change if it is an amendment: Fees or funding increases are not anticipated to be necessary to the implementation of this amendment.

(8) State whether or not this administrative regulation established any fees or directly or indirectly increased any fees: This administrative regulation does not establish any fees nor directly nor indirectly increase any fees.

(9) TIERING: Is tiering applied? Yes, tiering is applied in this administrative regulation. 401 KAR 10:031 provides special requirements for dischargers to cold water aquatic habitat. Any waterway categorized as an outstanding state resource water will also have special requirements according to this administrative regulation, and more stringent dissolved oxygen criteria have been added for Outstanding State Resource Water.

#### FISCAL NOTE ON STATE OR LOCAL GOVERNMENT

1. Does this administrative regulation relate to any program, service, or requirements of a state or local government (including cities, counties, fire departments, or school districts)? Yes

2. What units, parts or divisions of state or local government (including cities, counties, fire departments, or school districts) will be impacted by this administrative regulation? This administrative regulation will affect the wastewater treatment operations of local government if they will have new or expanded discharges into surface waters of the Commonwealth.

3. Identify each state or federal statute or federal regulation that requires or authorizes the action taken by the administrative regulation. This amended administrative regulation relates to local governments' wastewater treatment service. KRS 224.10-100, 224.70-100, and 224.70-110 mandate action taken by this administrative regulation.

4. Estimate the effect of this administrative regulation on the expenditures and revenues of a state or local government agency (including cities, counties, fire departments, or school districts) for the first full year the administrative regulation is to be in effect.

(a) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for the first year? This regulation will not generate any revenue

(b) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for subsequent years? This regulation will not generate any revenue.

(c) How much will it cost to administer this program for the first year? There will be no cost to state or local agencies to implement this regulation.

(d) How much will it cost to administer this program for subsequent years? There will be no cost to state or local agencies to implement this regulation.

Note: If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-): Cannot be determined.

Expenditures (+/-): Cannot be determined.

Other Explanation: This amended administrative regulation sets forth protective criteria for instream uses designated by the cabinet (see 401 KAR 10:026). Local governments will be required to discharge effluents which assure attainment of the receiving surface water's designated uses. The costs or savings of this amended administrative regulation would ordinarily be passed through to users; however, a local government that owns a public wastewater treatment system could elect to absorb some or all of the costs or savings. The revised water quality criteria will be implemented at the time of permit issuance at existing facilities and new dischargers and expanded facilities will comply with the revisions. Additional costs may be incurred where criteria are more stringent than before or where new criteria are established and

less costs may be incurred where criteria are less stringent than previously or where criteria have been eliminated. Some dischargers with KPDES permits may apply to increase discharge limits, resulting in more antidegradation reviews

#### FEDERAL MANDATE ANALYSIS COMPARISON

Federal statute or regulation constituting the federal mandate. There is no federal statute or regulation mandating that Kentucky implement a water pollution control program. For Kentucky to maintain its delegation over the NPDES permit program, the Clean Water Act requires that Kentucky review its water quality standards every 3 years and comply with the programmatic requirements of 40 C.F.R. Part 131, including the requirement for reviewing water quality criteria for appropriate revisions.

2. State compliance standards. 401 KAR 10:001, 10:026, 10:029, 10:030, and 10:031, the water quality standards regulations.

3. Minimum or uniform standards contained in the federal mandate. The Clean Water Act requires designated uses, criteria, standards and antidegradation policies in water quality standards.

4. Will this administrative regulation impose stricter requirements, or additional or different responsibilities or requirements than those required by the federal mandate? No, federal regulation 40 CFR 131.10 requires states to take into consideration the value of public water supply, protection and propagation of fish shellfish and wildlife, and recreation in and on the water. Some higher quality waters (Outstanding State Resource Waters, or OSRW) require additional measures to protect that quality. Thus, Kentucky's structure of designated uses is not more stringent than the federal mandate. Most states have regulations similar to Kentucky's designated uses: aquatic life, human health for drinking water and consumption of fish tissue, recreation, and a category similar to our OSRW, and have had these designated uses approved by EPA. EPA is promoting and has published a guidance document on the concept of a tiered aquatic life use framework, which Kentucky is proposing by adding more excellent waters to the OSRW use.

5. Justification for the imposition of the stricter standard, or additional or different responsibilities or requirements. There are no stricter standards or additional or different responsibilities or requirements. Please see the agency's response to question #4.